LOUISIANA DEPARTMENT OF WILDLIFE AND FISHERIES

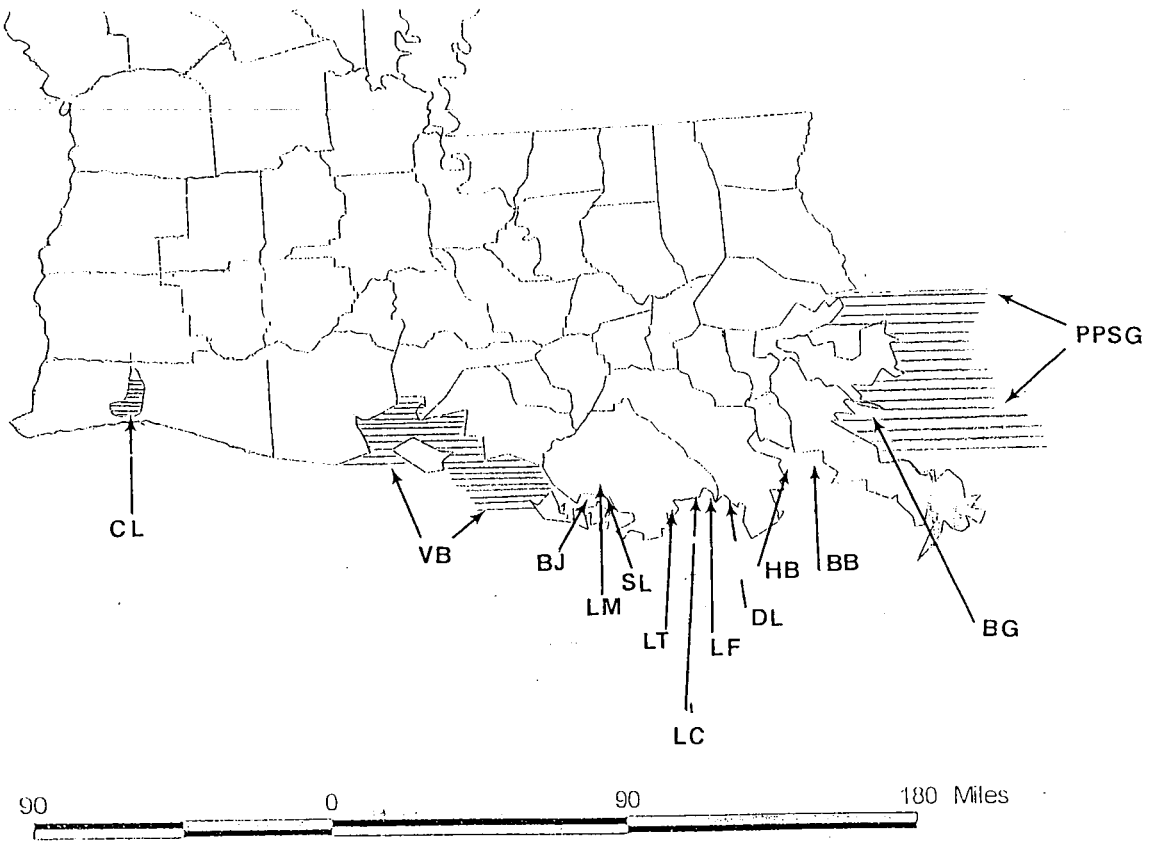
MARINE FISHERIES DIVISION

2001 OYSTER STOCK ASSESSMENT REPORT ON THE PUBLIC SEED GROUNDS AND SEED RESERVATIONS

OYSTER DATA REPORT SERIES NO. 7

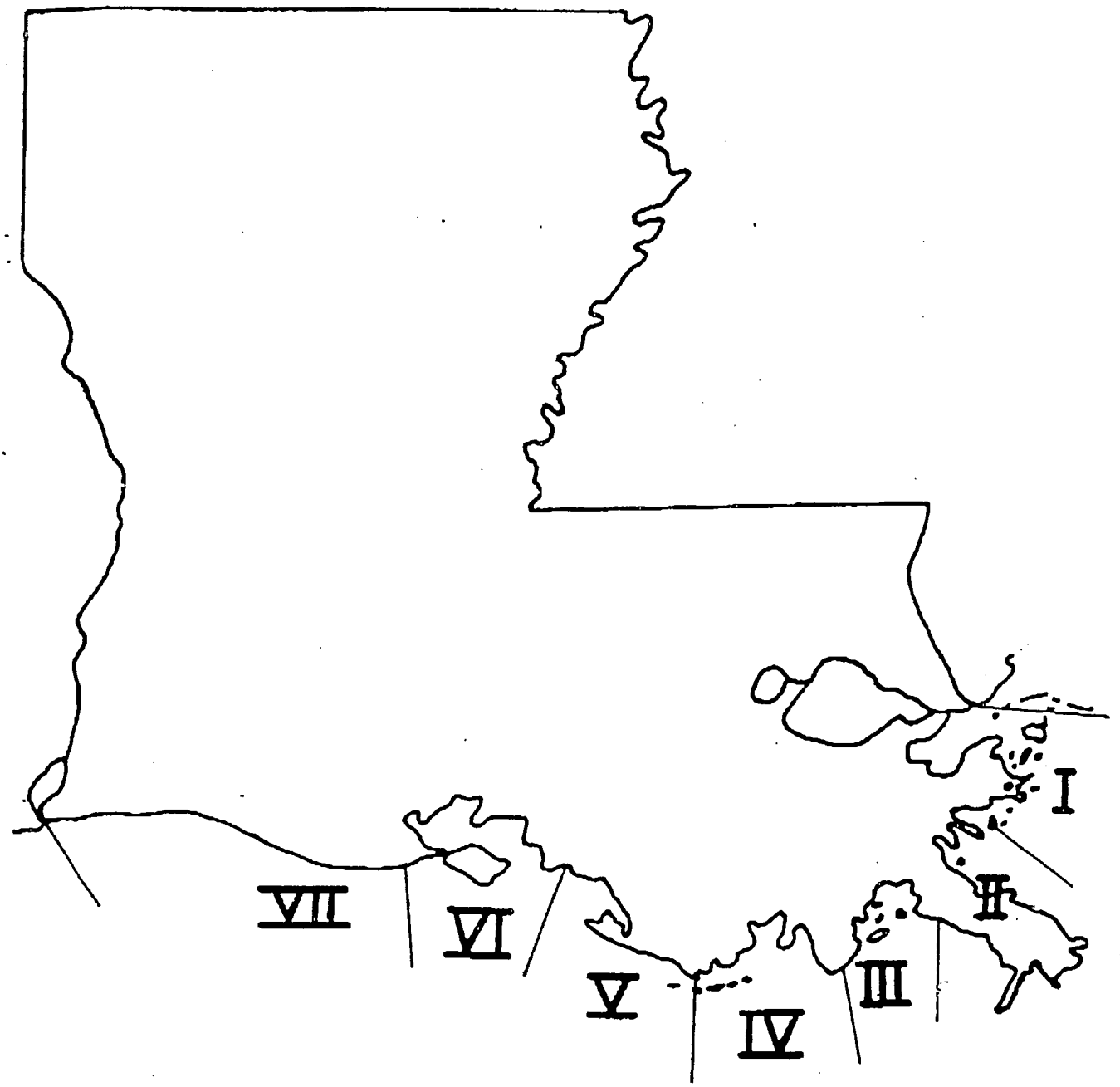
JULY, 2001

PUBLIC OYSTER SEED GROUNDS AND RESERVATIONS



LEGEND

PPSG	-	Primary Public Seed Grounds
BG	-	Bay Gardene Oyster Seed Reservation
BB	-	Barataria Bay Public Seed Grounds
HB	-	Hackberry Bay Oyster Seed Reservation
DL	-	Deep Lake Public Oyster Seed Grounds
LF	-	Lake Felicity Public Oyster Seed Grounds
LC	-	Lake Chien Public Oyster Seed Grounds
LT	-	Lake Tambour Public Oyster Seed Grounds
SL	-	Sister Lake Oyster Seed Reservation
LM	-	Lake Mechant Public Oyster Seed Grounds
BJ	-	Bay Junop Oyster Seed Reservation
VB	-	Vermilion Bay Public Oyster Seed Grounds
CL	-	Calcasieu Lake Public Tonging Grounds


I
II
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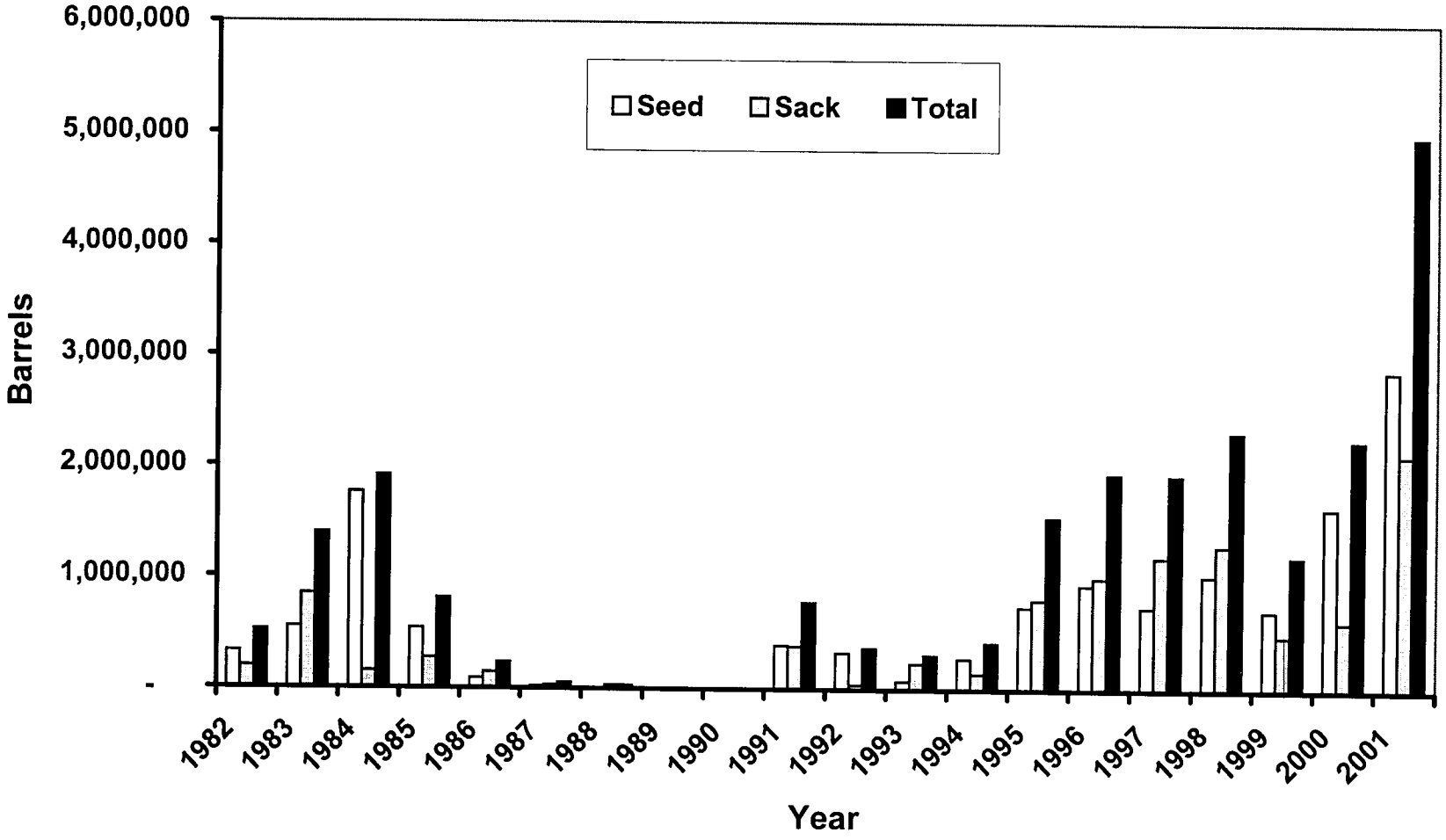
COASTAL STUDY AREA I ANNUAL OYSTER STOCK SIZE



State of Louisiana

DEPARTMENT OF WILDLIFE AND FISHERIES

1600 CANAL STREET
New Orleans, LA 70112
(504) 568-5685

M.J. "Mike" Foster
Governor

James H. Jenkins, Jr.
Secretary

July 17, 2001

M E M O R A N D U M

TO: Karen Foote, Administrator, Marine Fisheries Division

FROM: Clarence Luquet, Biologist Supervisor,
Coastal Study Area II

SUBJECT: CSA II Meter Square Samples ***2001***

Personnel from Coastal Study Area II completed the 2001 meter square sampling project on July 11,2001. A total of 28 stations were sampled from Bay Gardene and Northern Black Bay to Breton Sound. We found 1,925,709 barrels of seed oysters and 2,321,498 barrels of sack oysters for a total of 4,247,207 barrels overall.

The overall availability is about the same as last year and well above the long term averages. The area has an all time high for sack oyster population with the next closest year, 1996, having 2.1 million barrels.

Relative to last year, the stock of seed oysters is **down** by 1,488,697 barrels (35%), while sack oyster availability is **up** by 1,444,150 barrels (62%). Ample seed oysters were found at most Black Bay, Bay Crabe, and Bay Gardene reefs, but were more abundant in California Bay. Sack oysters appear to be more numerous in Southern Black Bay, and California Bay. The record sack population is due to the growth of a record seed crop last year to market size, and low mortalities from reduced fishing effort in CSA 2 last season. Despite a drought year salinities were mitigated by Caernarvon, and increased river stage early this year. This no doubt kept invertebrate predators from becoming established in the area.

Unfortunately the results of this June's dermo sampling are not available to me at this time.

Mussel counts were made at each station. Mussels were encountered at most stations but were light overall, the lightest infestation in recent years, with the most fouling being near Bay Gardene.

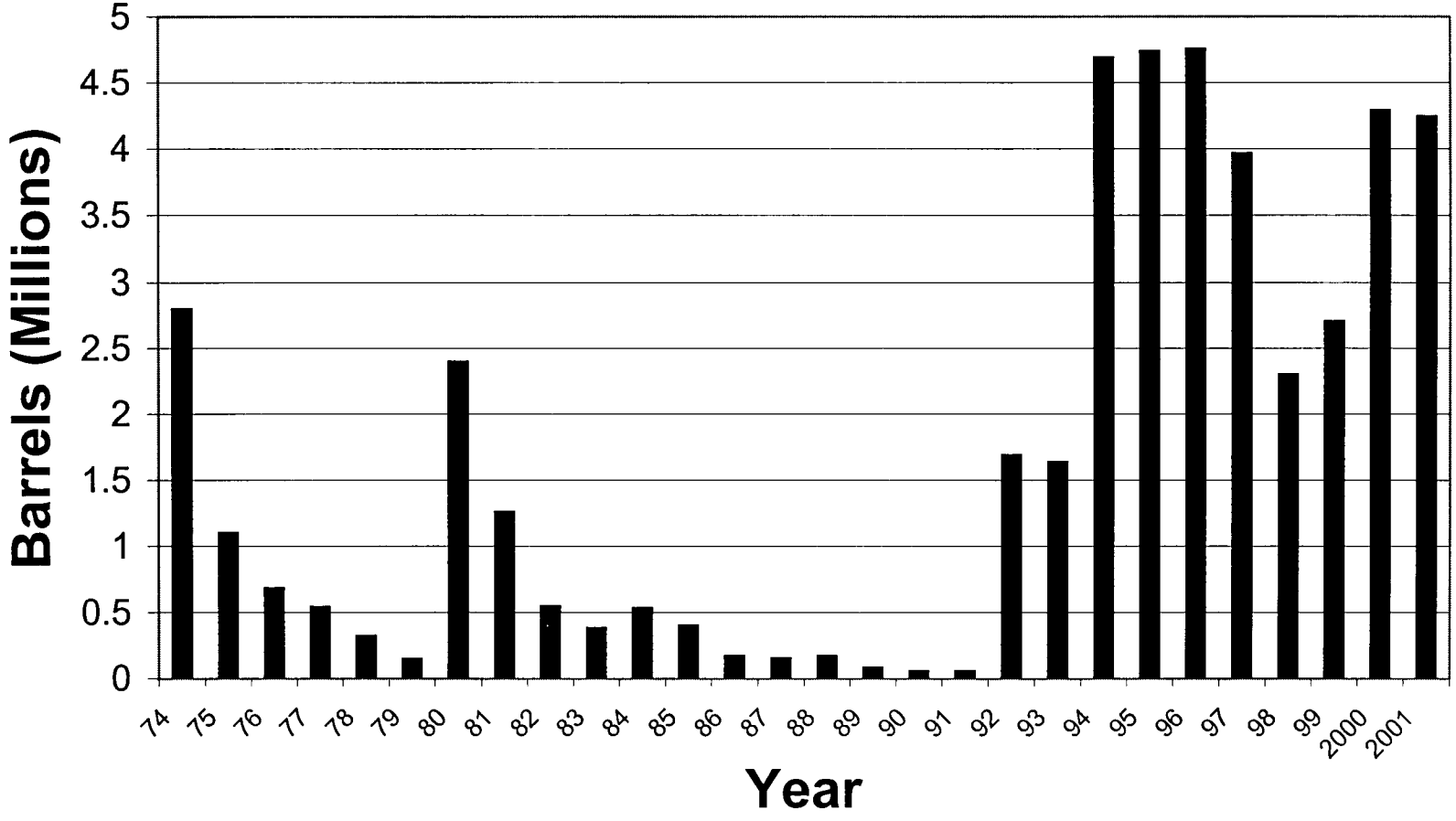
Assessment by station are presented in tabular form (see table). A map of seed, and sack oysters is included.

Mortalities ranged from 0% at Telegraph Island (#15) to 33% at "The Wreck" (#28), but averaged only 7.4 percent across the area.

2001 METER SQUARES						
stations	acres	sq. meters	seed	sack	BBLS SEED	BBLS SACK
1	506	2,047,782	59.5	12	169,226	68,259
2	59	283,773	28.0	53	11,036	41,778
3	896	3,626,112	7.0	7.5	35,254	75,544
4					see 4,26	combined data
5	118	477,546	31.0	16.5	20,561	21,888
6	716	2,897,652	16.5	8.5	66,405	68,417
7	301	1,218,147	59.0	53.5	99,820	181,030
8	501	2,027,547	48.0	23	135,170	129,538
9	461	1,865,667	48.5	14.5	125,673	75,145
10	145	586,815	12.0	4.5	9,780	7,335
11	339	1,371,933	10.0	5	19,055	19,055
12	425	1,719,975	84.5	89.5	201,858	427,605
13	109	441,123	9.0	23.5	5,514	28,796
14	7	28,329	35.5	48.5	1,397	3,817
16	174	704,178	86.5	34	84,599	66,506
17 SKIP	659	2,666,973			private leases / discontinued	
19	937	3,792,039	90.5	58	476,638	610,940
20	293	1,185,771	40.5	54	66,700	177,866
21	659	2,666,973	41.5	16.5	153,721	122,236
22	122	493,734	25.5	29	17,486	39,773
23	28	113,316	54.0	18.5	8,499	5,823
24	69	279,243	77.5	9.5	30,057	7,369
4,26	315	1,274,805	5.8	9	10,181	31,870
15	127	513,969	4.3	4	3,091	5,711
18	1,528	3,164,754	2.0	1	8,791	8,791
26 SKIP					see 4,26	combined data
25	1419	5,742,693	0.0	0	0	0
27	4288	17,353,536	6.5	2	156,664	96,409
28	2276	9,210,972	0.7	0	8,533	0
			Sub Total		*1,925,709*	*2,321,498*
ALL TOTAL					***4,247,207***	

Oysters Available on the Public Oyster Grounds in Coastal Study Area II

(Seed and Sack Oysters Combined)



Coastal Study Area 2 Oyster Availability 2001

CSA1 and CSA 2 Oyster Availability Public Grounds (barrels)

	CSA 1			CSA 2		
Year	Seed	Sack	CSA 1 Total	Seed	Sack	CSA2 Total
1982	329,206	194,353	523,559	205,262	343,268	548,530
1983	549,455	845,374	1,394,829	87,687	293,897	381,584
1984	1,760,870	151,948	1,912,818	328,060	205,002	533,062
1985	538,514	272,209	810,723	213,681	188,280	401,961
1986	88,526	145,794	234,320	32,395	138,345	170,740
1987	22,350	34,384	56,734	72,482	80,589	153,071
1988	-	34,384	34,384	26,782	59,261	86,043
1989	-	-	-	35,320	49,955	85,275
1990	-	-	-	38,870	18,100	56,970
1991	393,677	385,037	778,714	40,977	17,611	58,588
1992	326,699	44,324	371,023	1,531,726	158,377	1,690,103
1993	75,955	233,311	309,266	811,992	824,861	1,636,853
1994	275,764	146,166	421,930	3,085,107	1,606,981	4,692,088
1995	738,718	804,664	1,543,382	2,842,004	1,898,344	4,740,348
1996	935,724	999,276	1,935,000	2,658,336	2,100,073	4,758,409
1997	737,265	1,188,868	1,926,133	2,096,675	1,870,146	3,966,821
1998	1,022,360	1,293,666	2,316,026	1,524,350	777,678	2,302,028
1999	709,798	485,372	1,195,170	1,711,318	994,754	2,706,072
2000	1,631,581	613,847	2,245,428	3,414,406	877,348	4,291,754
2001	2,872,001	2,111,114	4,983,115	1,925,709	2,321,498	4,247,207

NOTE: 1988 CSA2 error found and corrected

State of Louisiana

DEPARTMENT OF WILDLIFE AND FISHERIES
Lyle S. St. Amant Marine Laboratory
P. O. Box 37
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M.J. "Mike" Foster
Governor

James H. Jenkins, Jr.
Secretary

Date: July 17, 2001

To: Karen Foote, Administrator

From: John Dameier, Biologist Manager

Re: Hackberry Bay Public Oyster Seed Reservation Meter Square Samples

Meter square oyster samples were collected July 10, 2001. Samples were taken at three stations (upper, middle, and lower) with one replicate at each site (Figure 1). Oysters were measured in 5 -mm size classes, averaged for each class, and divided into groups of spat, seed, and sack oysters. Figure 2 shows the frequency distribution of each size class. Spat oysters which measured less than 25 mm averaged 16.5 per m^2. This number was lower than last year but exceeded the four years prior to 2000 (Figure 3). Seed oysters which measured 25 mm to less than 75 mm averaged 16.7 per m^2. This number exceeded last year but was below that of the three years prior to 2000. Sack oysters which measured 75 mm and greater averaged 11.5 per m^2. This number was greater than the past five years.

Oysters per m^2 were extrapolated for 5.938 hectares (14.7 acres) of reef. The results were 1,374.5 barrels of seed oysters and 3,793.7 1 sacks or 1,896.9 barrels of marketable oysters (Table 1).

Salinities averaged 19.8 ppt for the month of May which was above the average of 13.6 ppt. May averages of constant recorder data are presented in Figure 4. May temperatures averaged 26.5 °C which was just below the norm of 27.0 °C. June salinities averaged 10.4 ppt which was below the norm of 11.7 ppt. Temperatures averaged 28.5 °C which was below the average of 29.1 °C (Figure 5). Tropical Storm Allison made landfall in Galveston, Texas June 6th, 2001. Heavy rainfall and runoff into the system has reduced salinities to below 5 ppt with a minimum of 2 ppt for about a month. These conditions along with high temperatures are conducive to oyster mortalities. Mortalities were reported from North Hackberry Bay to be about 50 %. Higher mortality rates have been reported in areas farther north. Monitoring will continue throughout the summer to document mortality rates.

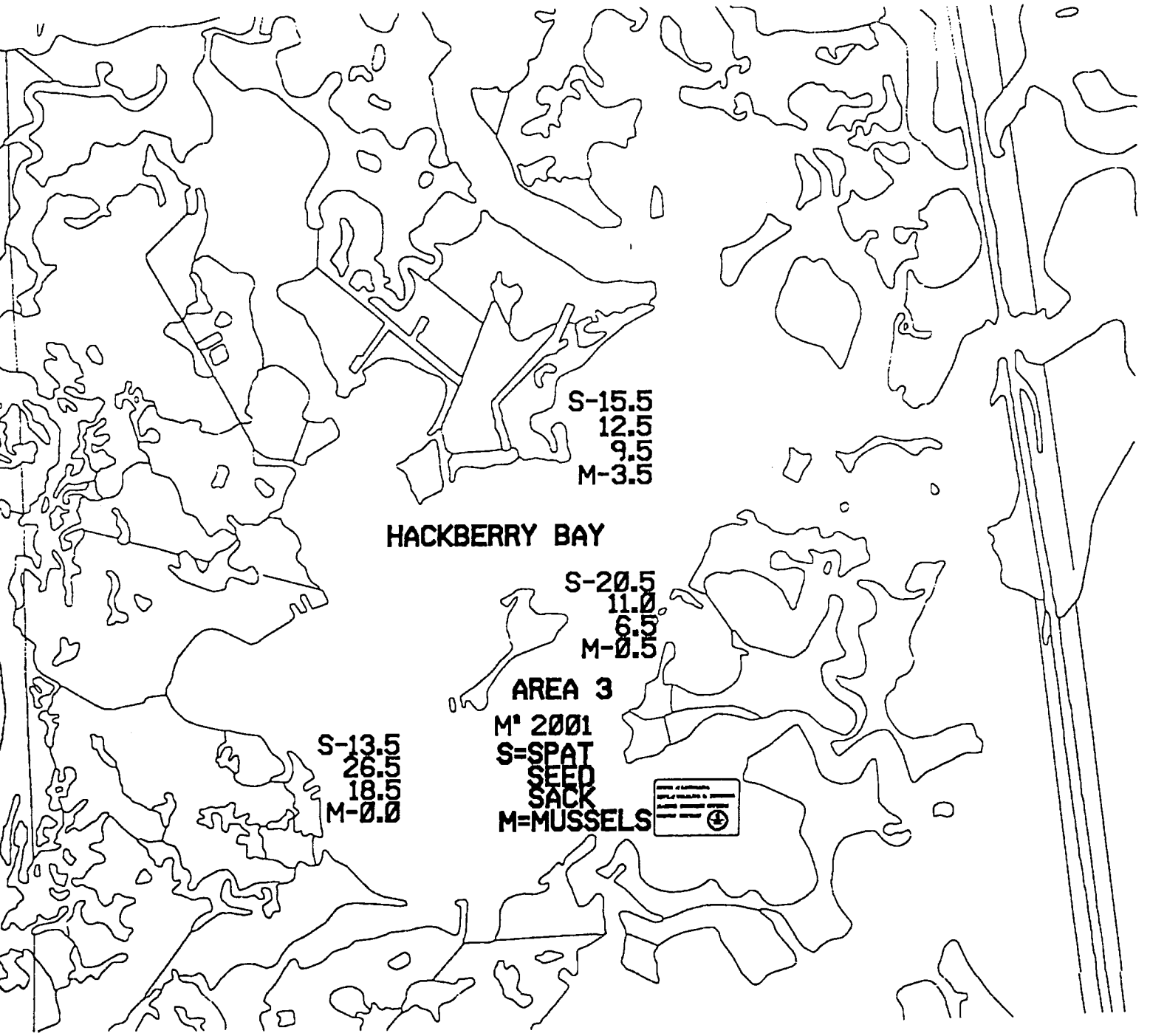

S-15.5
12.5
9.5
M-3.5
HACKBERRY BAY
S-20.5
11.0
6.5
M-0.5
AREA 3
M' 2001
S=SPAT
SEED
SACK
M=MUSSELS
S-13.5
26.5
18.5
M-0.0

Figure 2.

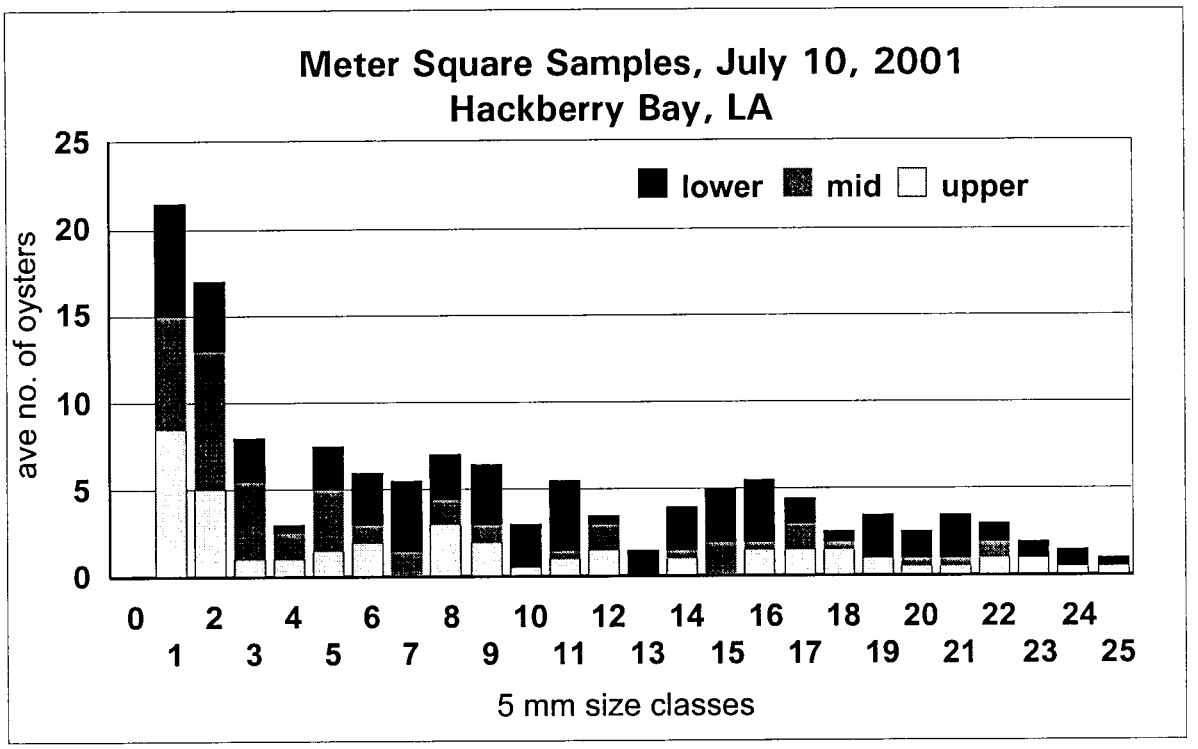


Figure 3.

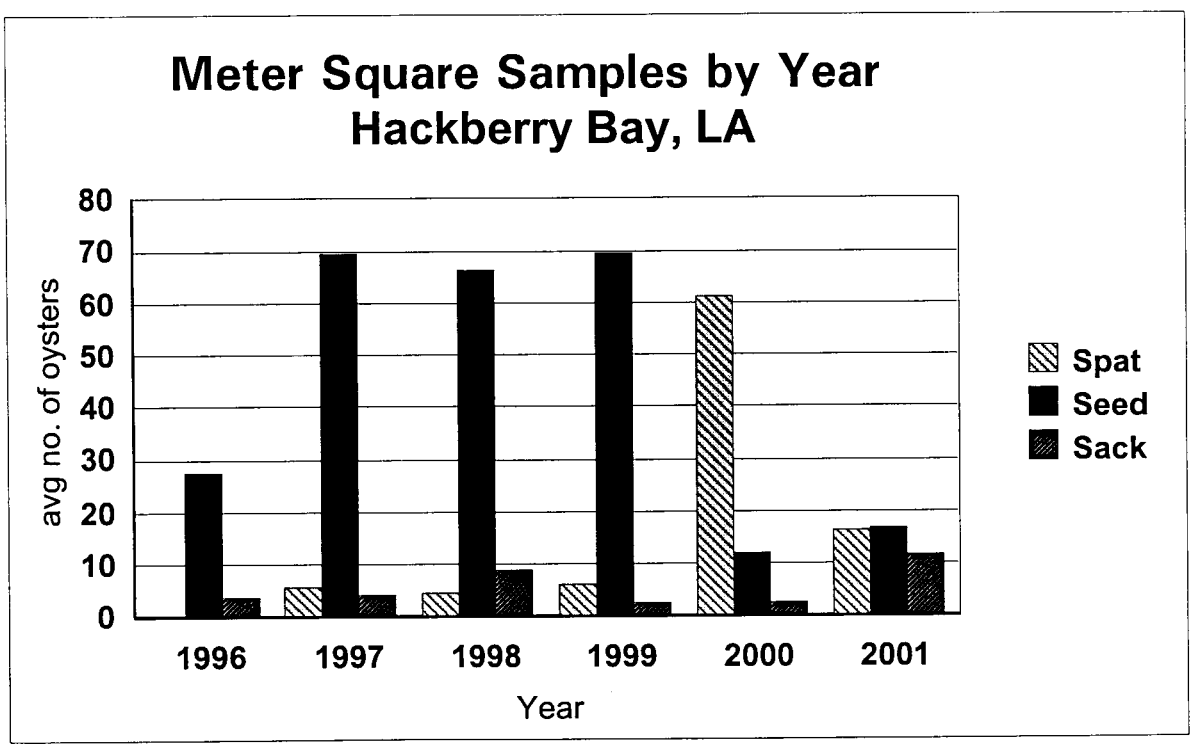
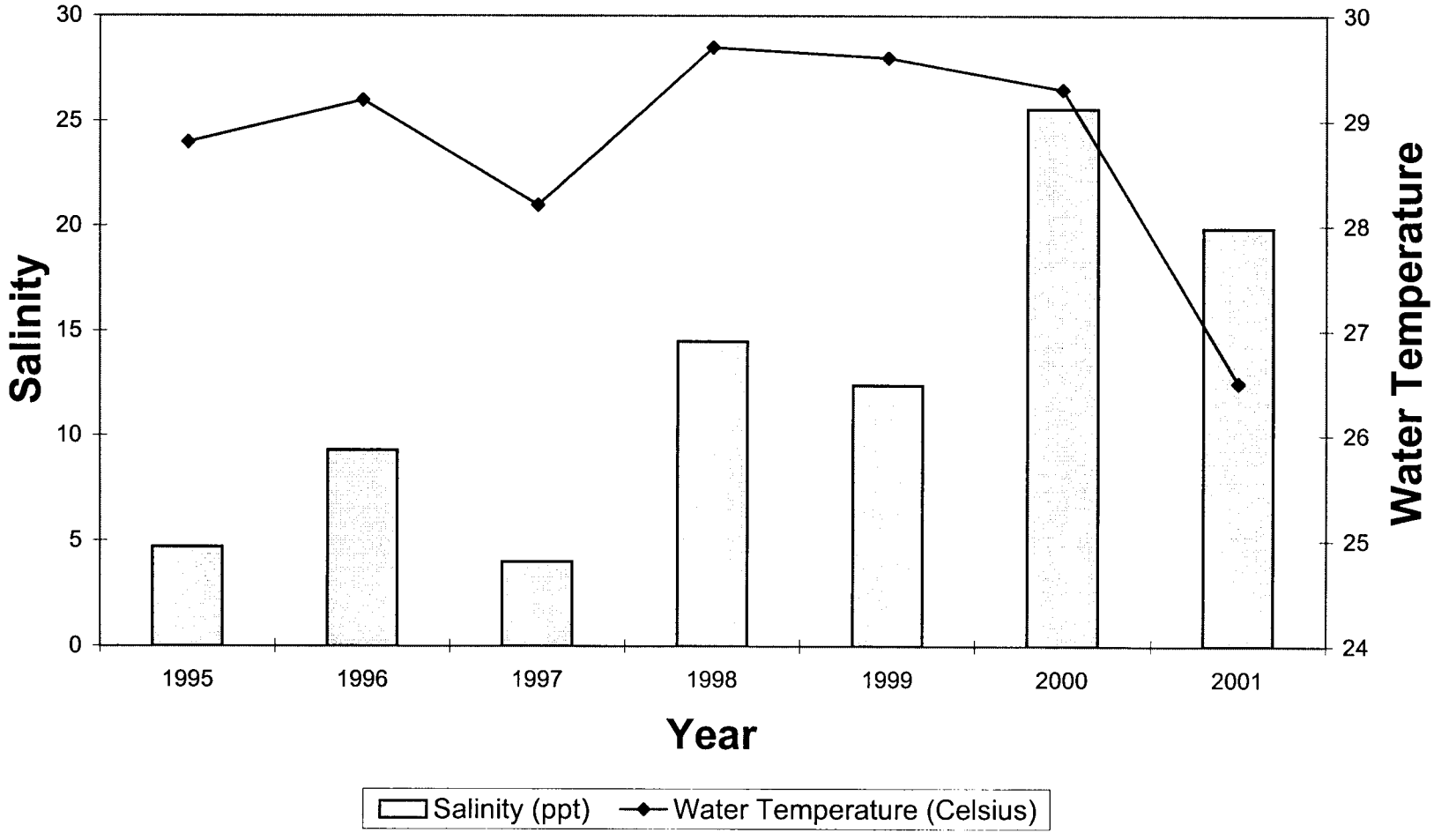


Table 1.

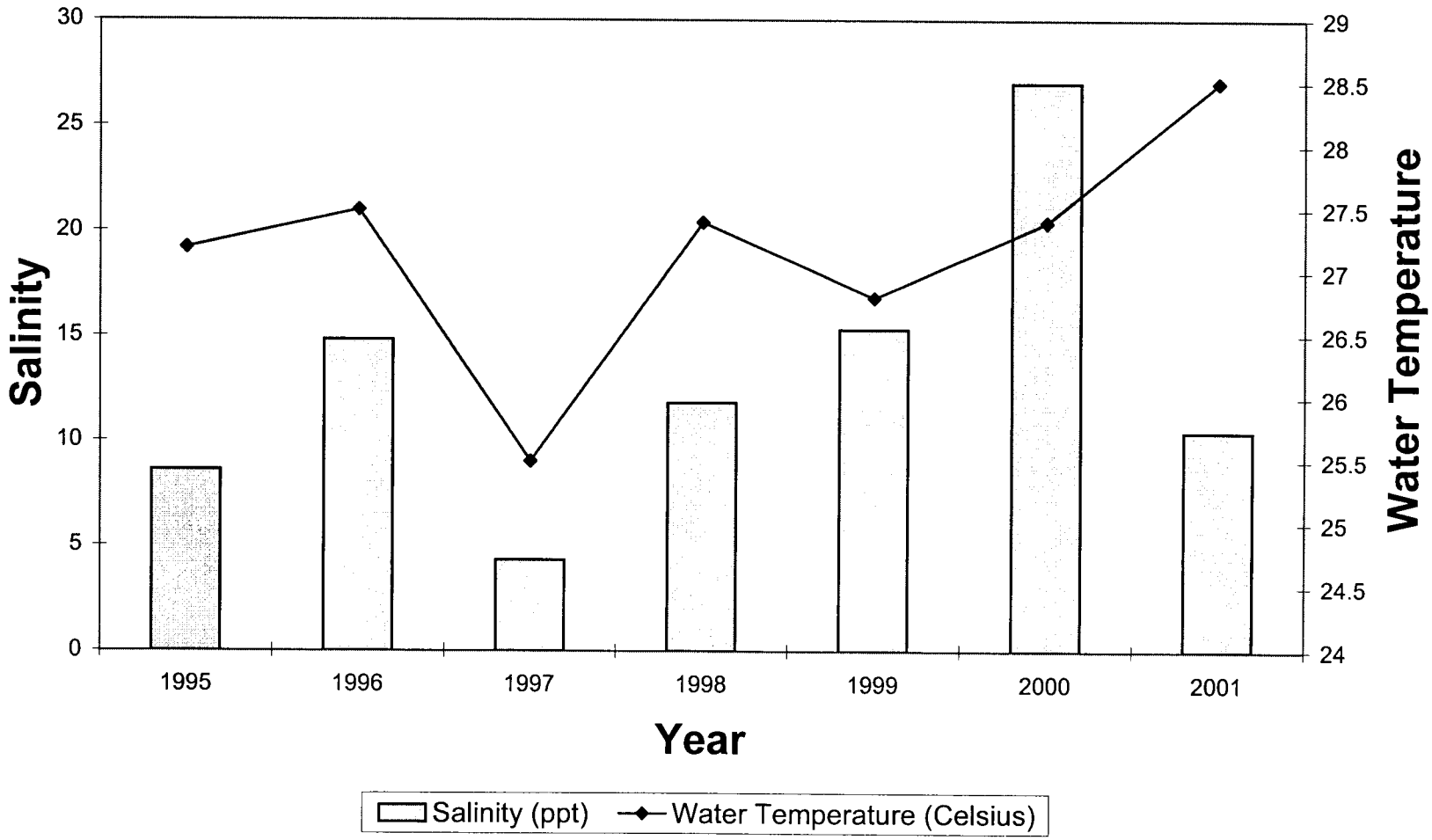
2001 HACKBERRY BAY OYSTER AVAILABILITY (Reefs Only)

METER^2 STATION	REEF ACREAGE	# METER^2	# SEED OYSTERS	# SACK OYSTERS	BARRELS SEED OYSTERS	BARRELS SACK OYSTERS
1, 2, 3	14.7	59,380.0	16.7	11.5	1,374.5	1,896.9

MAY HACKBERRY BAY SALINITY AND WATER TEMPERATURE



JUNE HACKBERRY BAY SALINITY AND WATER TEMPERATURE



State of Louisiana

James H. Jenkins, Jr.
Secretary

Department of Wildlife and Fisheries
Post Office Box 98000
Baton Rouge, LA 70898-9000
(504)765-2800

M.J. "Mike" Foster, Jr.
Governor

July 17, 2001

MEMORANDUM:

TO: Karen Foote, Division Administrator

FROM: Stephen Hein, Paul Meier, and Manuel Ruiz

SUBJECT: CSA-V Meter Square Oyster Samples/2001 Stock Assessments

On July 11, 2001, with diving assistance from Coastal Study Area I personnel, all meter square samples associated with the 2001 oyster stock assessment on Coastal Study Area V's two public seed reservations (Sister Lake and Bay Junop) were completed. A total of 14 stations, nine in Sister Lake (including 1994 and 1995 shell plants) and five in Bay Junop were sampled, along with replicates at each station (Tables and Figures).

The 2001 stock assessment conducted in Sister Lake indicates a significant increase in oyster stock size from 2000 levels (Tables and Figures) with totals of 304,763 barrels of seed oysters (20% increase) and 343,656 barrels of sack oysters (78% increase) available for harvest. Current stocks of market size "sack" oysters as well as seed oysters represent, respectively, the third and fifth highest stock size measured since 1980. Results from the current Sister Lake assessment of 1994-95 shell plant stocks (combined acreage) indicate 233,102 barrels of seed and 227,908 barrels of sack oysters available for harvest, representing a 35% increase in seed oyster and 84% increase in sack oyster availability from 2000 shell plant stock levels. Oyster stock levels over natural reefs within Sister Lake indicate 71,661 barrels of seed and 115,748 barrels of sack oysters available for harvest, a decrease of 23% in seed oyster availability but a 65% increase in sack oyster availability from 2000 stock levels. The current ratio of seed to sack oyster availability from Sister Lake (0.9-1.0), although usually erratic among years, compares well with values of 1.0-1.0, 0.9-1.0 and 1.5-1.0 calculated in the 1997 through 1999 assessments (Tables).

While seed and sack stock in Sister Lake increased from 2000 levels, seed and sack oyster stock levels have decreased in Bay Junop over the same period. The Bay Junop seed grounds were open for harvest during the 2000-2001 oyster harvest season, ending May 15, 2001. Results from the 2001 Bay Junop stock assessment suggest 29,453 barrels of seed and 32,005 barrels of sack oysters available for harvest; respective decreases of 14% and 48% from 2000 stock levels. The current ratio of seed to sack oyster availability found within Bay Junop (0.9-1.0) compares favorably to 1997, 1998 and 2000 but poorly with values (2.2-1.0) identified in the 1999 assessment.

Average water temperatures in Sister Lake and Bay Junop were slightly below normal for May but average for June. Salinities in Sister Lake were elevated in May (17.6 ppt) but returned to normal in June, while salinity in Bay Junop was somewhat depressed in June. The entire area experienced extremely low salinities for approximately ten days during June following Tropical Storm Allison and the resultant 27+ inches of rainfall and subsequent water runoff. Extra oyster dredge samples collected on the seed grounds following this event revealed normal mortality rates.

The total number of hooked mussels were recorded from all samples and replicates. Overall, biofouling rates of hooked mussels in Sister Lake and Bay Junop varied significantly from station to station, with nominal to no fouling at five of nine Sister Lake stations and three of five Bay Junop stations. In general, the frequency distribution of hooked mussels signify higher fouling rates associated with decreased salinity. Highest fouling rates were observed at Grand Pass (764 mussels) and mid '94 shell plant (350 mussels) in Sister Lake. Infestation of mussels in Bay Junop was minimal especially as compared to 1998 and 1999.

Approximately 30 live oysters were also collected by divers from north and south stations in Sister Lake and Bay Junop and delivered to Dr. Thomas Soniat at Nicholls State University for Perkinsus marinus ("dermo") analysis. Results are unavailable at this time but will be forwarded upon completion.

SH:PM:MR/jbv

Attachments

2001 SISTER LAKE OYSTER AVAILABILITY

(REEFS ONLY)

METER² STATION	REEF ACREAGE	#METER²	#SEED OYSTERS	#SACK OYSTERS	BARRELS SEED OYSTERS	BARRELS SACK OYSTERS
200	221.58	896,734.26	34.0	31.0	42,345.8	77,218.8
202	81.93	331,570.71	42.0	13.5	19,341.6	12,433.9
203	151.31	612,352.00	10.5	13.5	8,930.1	22,963.2
207	185.72	751,608.84	1.0	1.5	1,043.9	3,131.7
TOTAL	640.54	2,592,265.7	87.5	59.5	71,661.4	115,747.6

(1994 SHELL PLANTS)

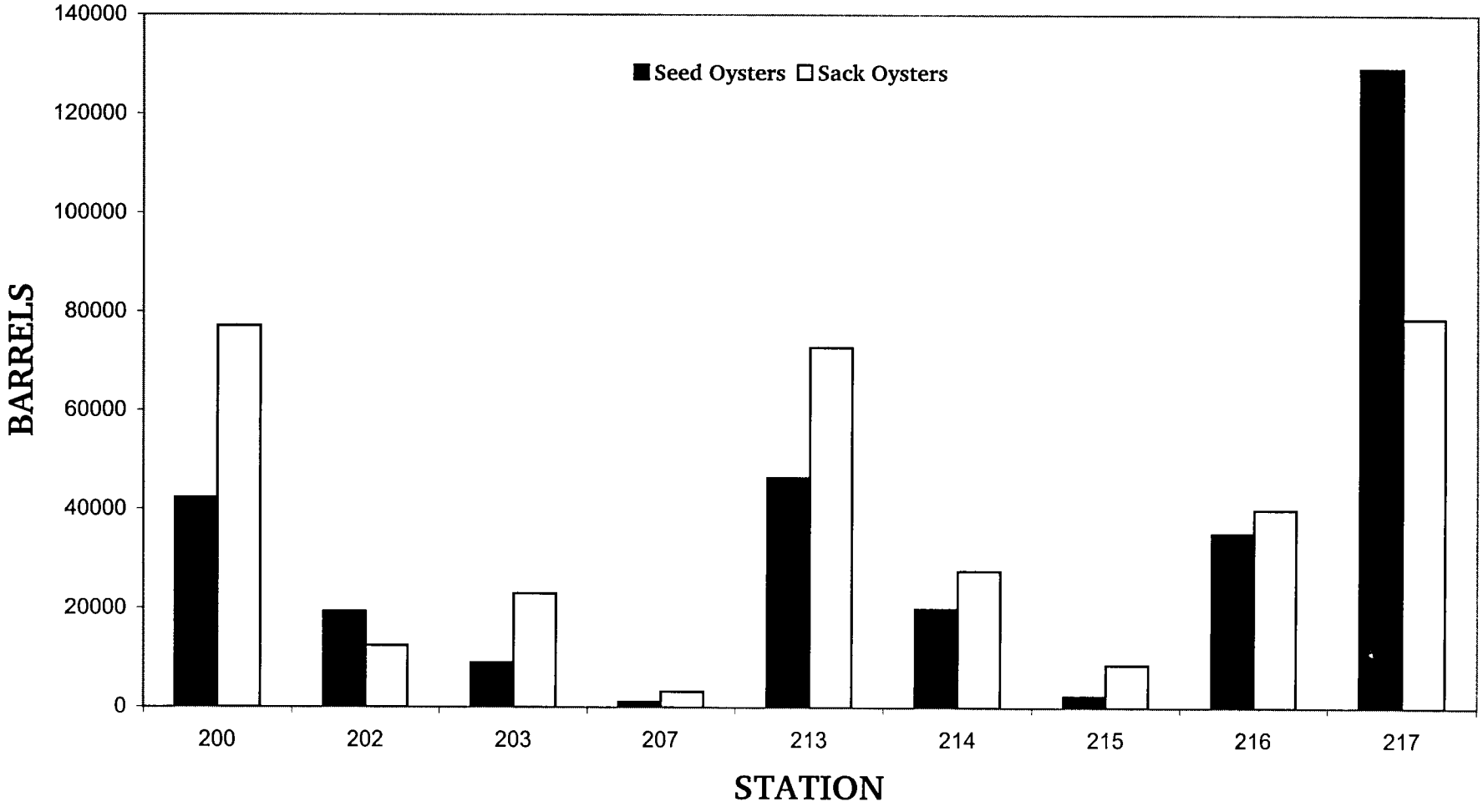
METER² STATION	REEF ACREAGE	#METER²	#SEED OYSTERS	#SACK OYSTERS	BARRELS SEED OYSTERS	BARRELS SACK OYSTERS
213	96	388,512	86.0	67.5	46,405.6	72,846.0
214	129	522,063	27.5	19.0	19,939.9	27,553.3
215	81	327,807	5.0	9.5	2,276.4	8,650.5
TOTAL	306	1,238,382	118.5	96.0	68,621.9	109,049.8

(1995 SHELL PLANTS)

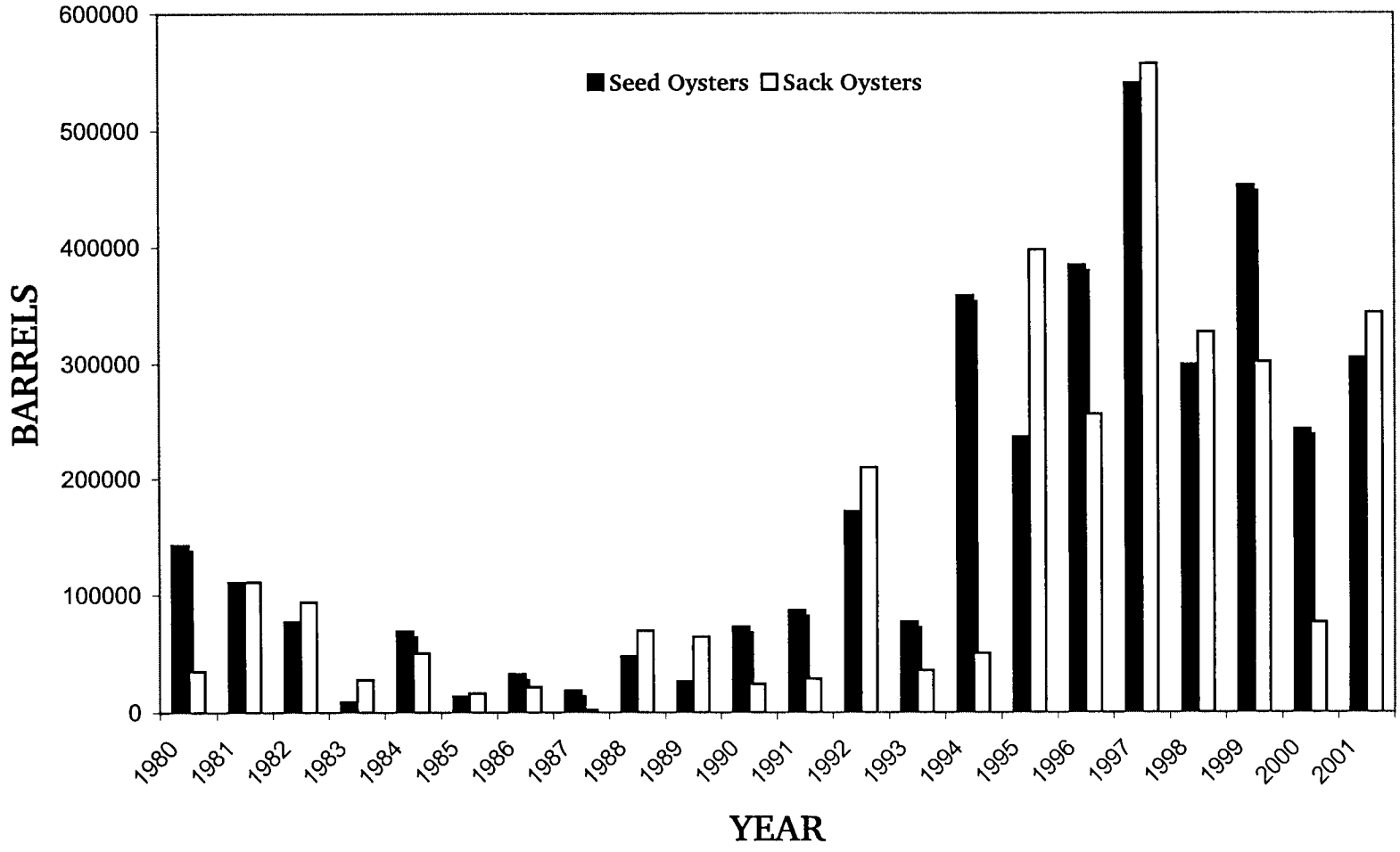
METER² STATION	REEF ACREAGE	#METER²	#SEED OYSTERS	#SACK OYSTERS	BARRELS SEED OYSTERS	BARRELS SACK OYSTERS
216	115	465,405	54.5	31.0	35,228.6	40,076.5
217	438	1,772,586	52.5	16.0	129,251.1	78,781.6
TOTAL	553	2,237,991	107.0	47.0	164,479.7	118,858.1

GRAND TOTAL	1,499.54	6,068,639	313	202.5	304,763	343,656

2001 SISTER LAKE OYSTER STOCK SIZE



SISTER LAKE HISTORICAL STOCK SIZE



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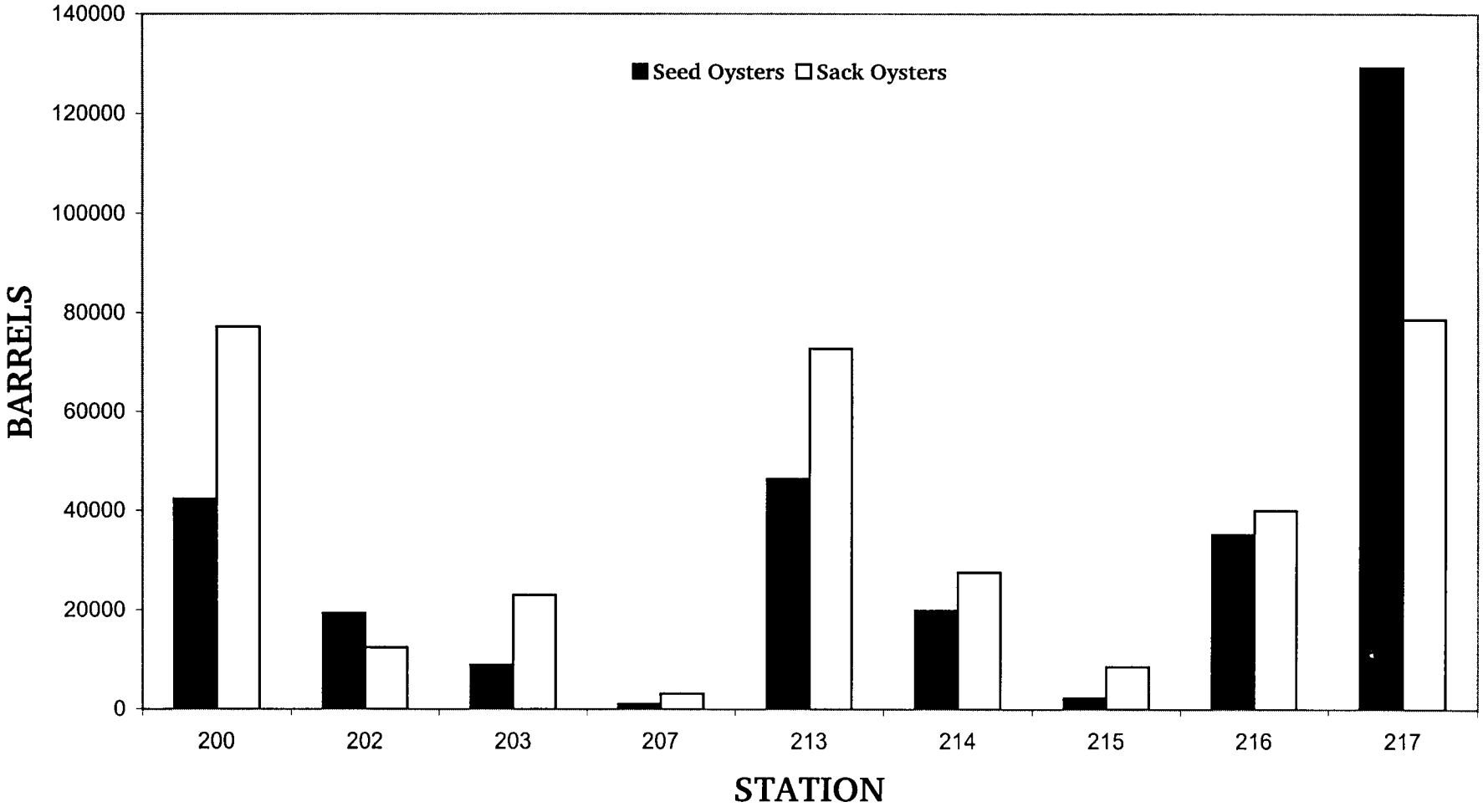
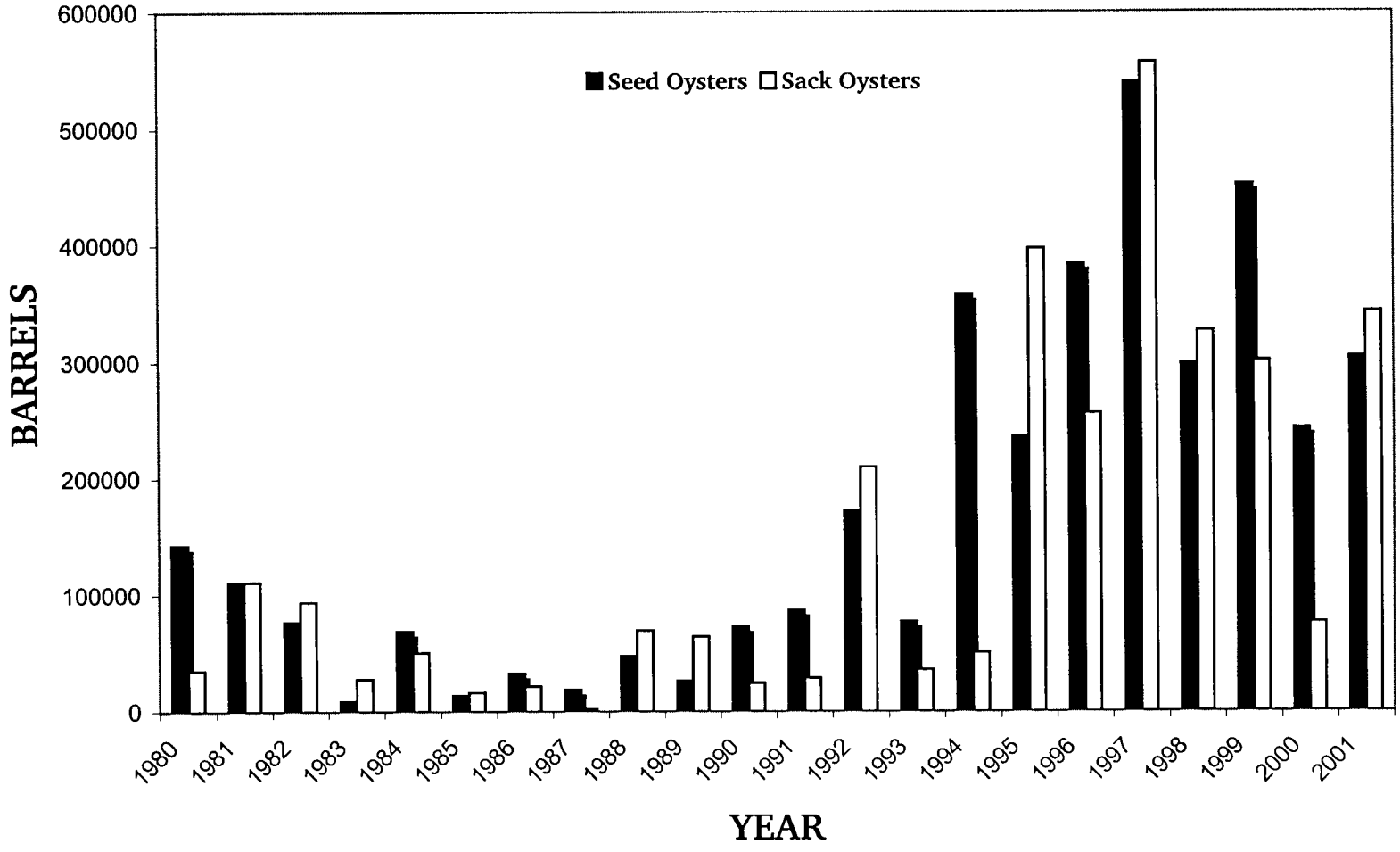
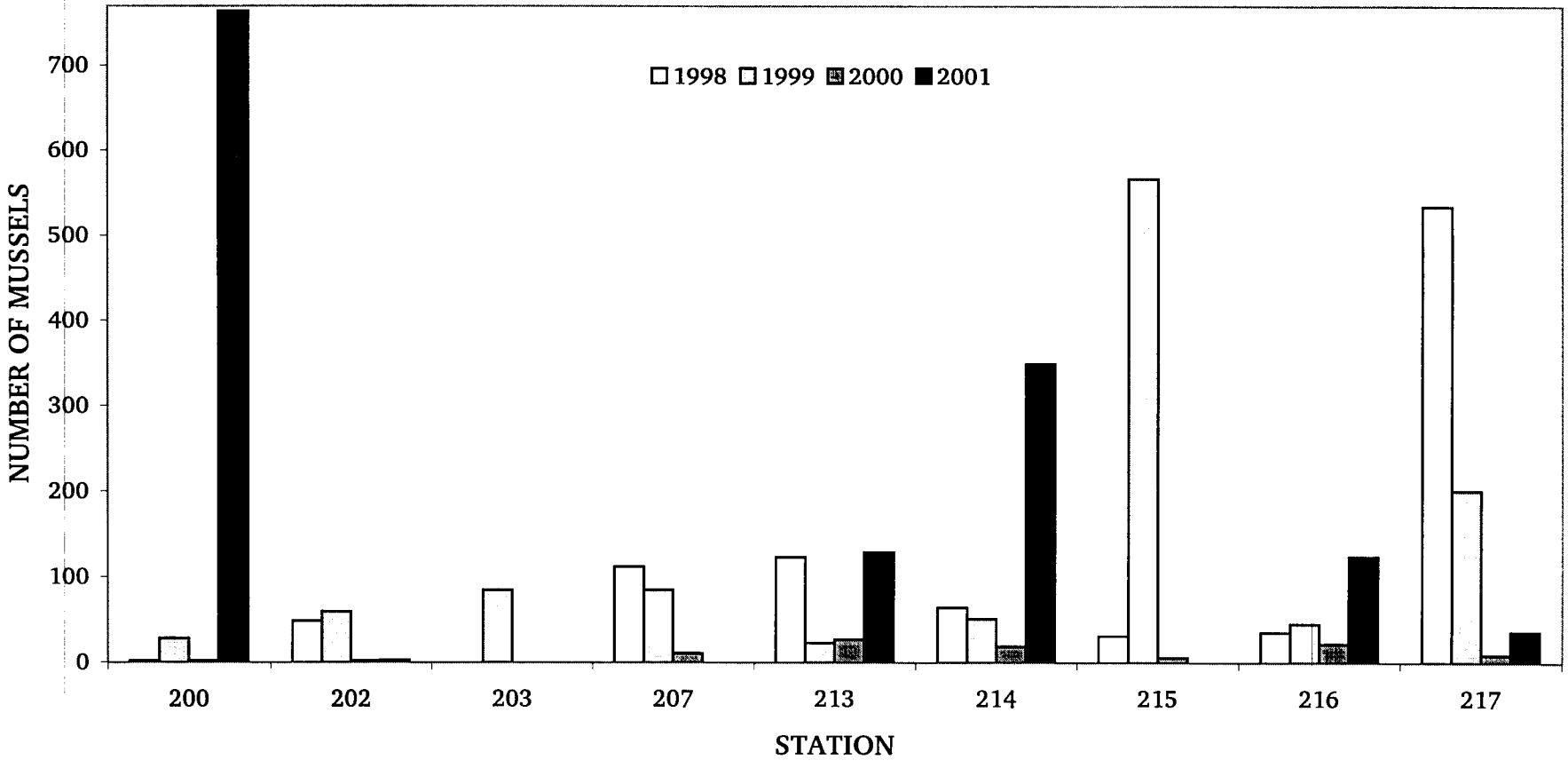
2001 SISTER LAKE OYSTER STOCK SIZE



SISTER LAKE HISTORICAL STOCK SIZE



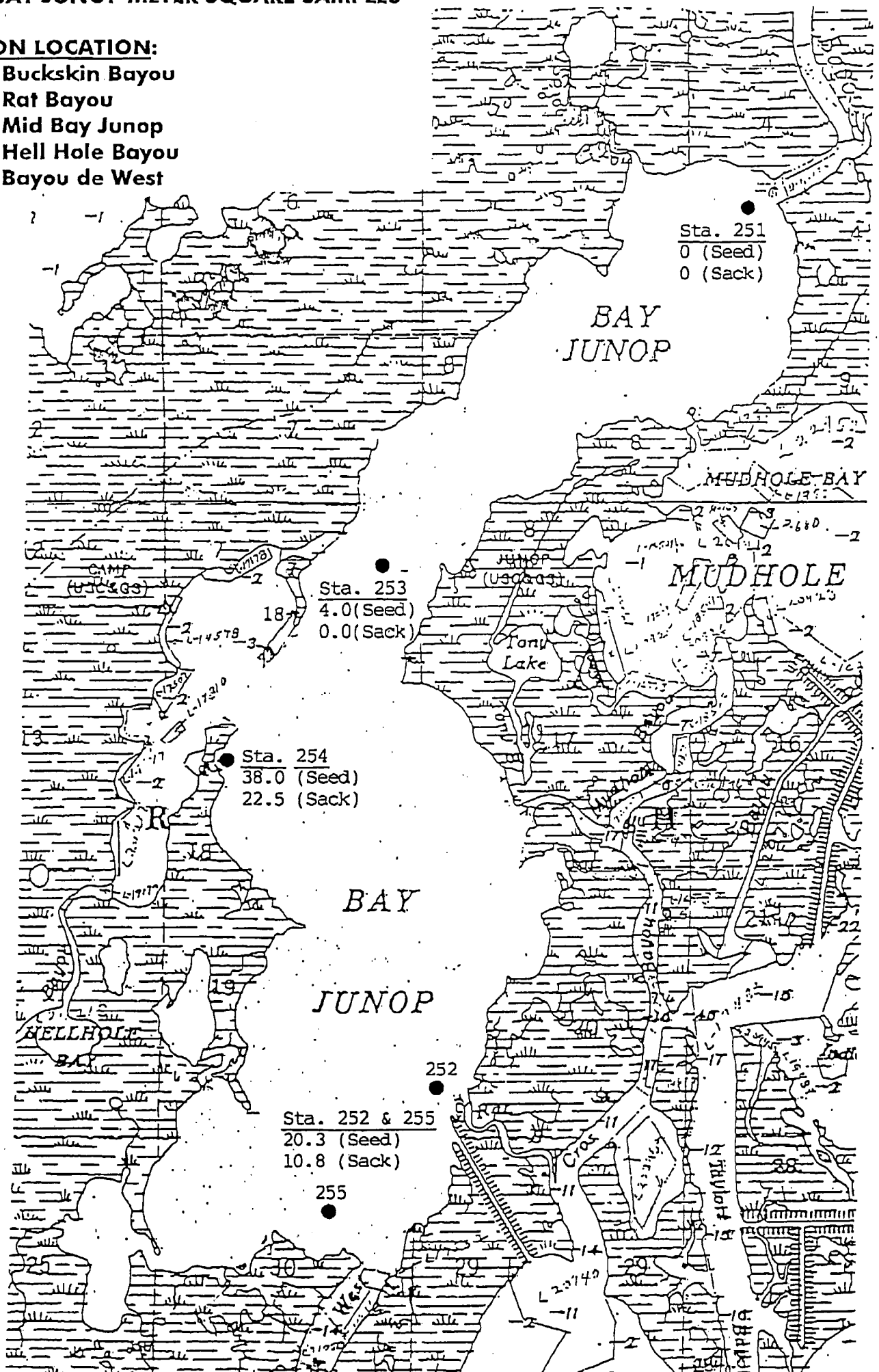
SISTER LAKE HOOKED MUSSEL FREQUENCY DISTRIBUTION ('98-'01)



2001 BAY JUNOP METER SQUARE SAMPLES

STATION LOCATION:

251 = Buckskin Bayou
252 = Rat Bayou
253 = Mid Bay Junop
254 = Hell Hole Bayou
255 = Bayou de West

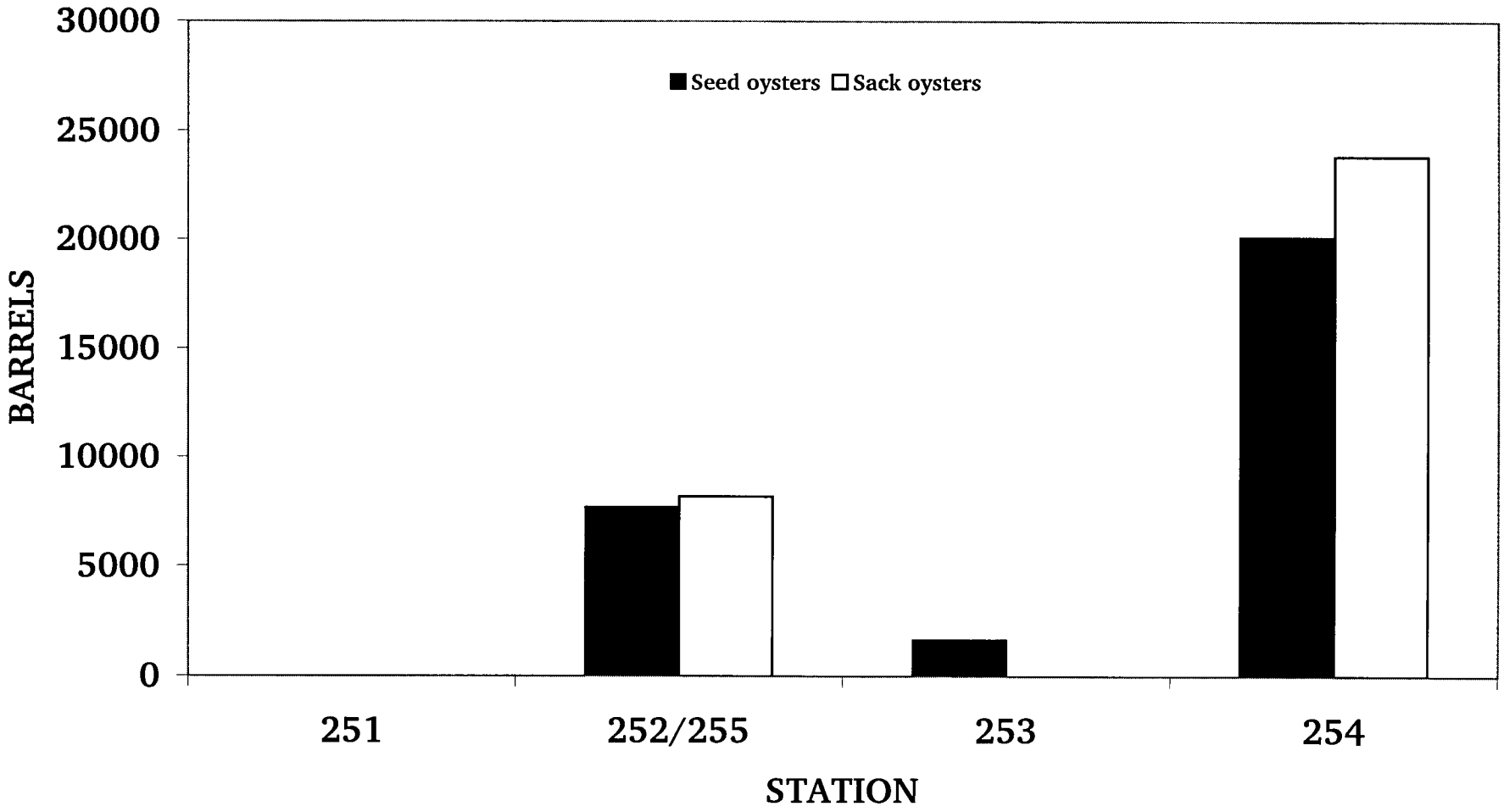


2001 BAY JUNOP OYSTER AVAILABILITY

METER² STATION	REEF ACREAGE	#METER²	#SEED OYSTERS	#SACK OYSTERS	BARRELS SEED OYSTERS	BARRELS SACK OYSTERS
251	17.2	69,608.40	0	0	0	0
252*	67.36	272,605.92	20.3	10.8	7,686.0	8,178.2
253	73.26	296,483.22	4.0	0	1,647.1	0
254	94.20	381,227.40	38.0	22.5	20,120.3	23,826.7
255*						
TOTAL	252.02	1,019,924.9	62.3	33.3	29,453.4	32,004.9

* Stations 252 and 255 are combined.

2001 BAY JUNOP OYSTER STOCK SIZE



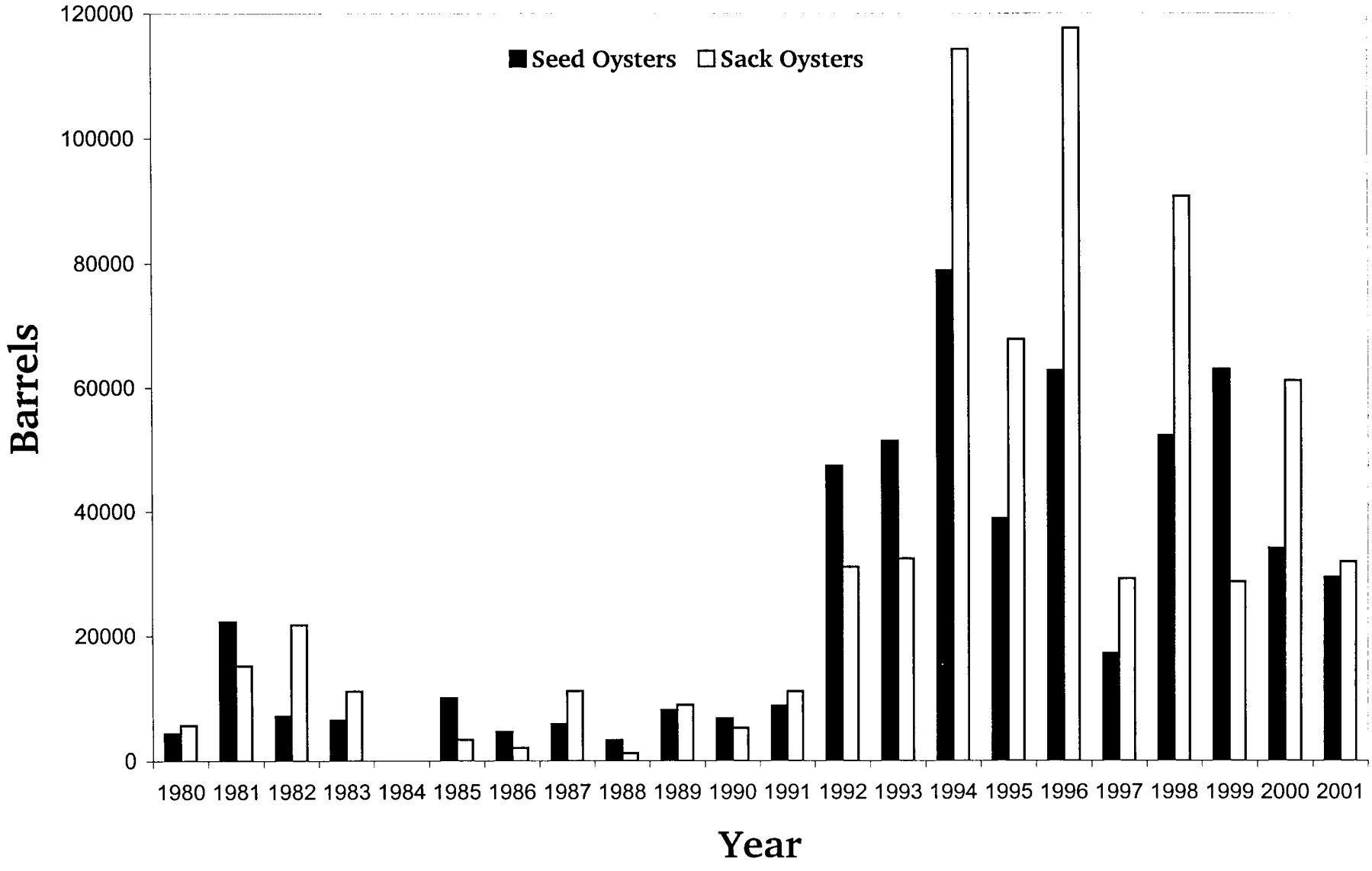
HISTORICAL METER SQUARE AVAILABLE OYSTER PRODUCTION ESTIMATES

BAY JUNOP

YEAR	BARRELS SEED	BARRELS SACK	TOTAL BBLS AVAILABLE PRODUCTION	RATIO SEED TO SACK AVAILABILITY
1980*	4,297.4	5,632.3	9,929.7	0.8-1.0
1981	22,329.0	15,213.0	37,542.0	1.5-1.0
1982	7,082.2	21,809.0	28,891.2	0.3-1.0
1983	6,464.0	11,129.0	17,593.0	0.6-1.0
1984**	----	----	----	----
1985	10,004.0	3,344.5	13,348.5	3.0-1.0
1986	4,632.0	4,317.0	8,949.0	1.1-1.0
1987	5,878.0	11,188.0	17,066.0	0.5-1.0
1988	3,282.0	1,169.0	4,451.0	2.8-1.0
1989	8,073.7	8,935.0	17,009.0	0.9-1.0
1990	6,787.0	5,249.5	12,036.5	1.3-1.0
1991	8,843.0	11,166.0	20,009.0	0.8-1.0
1992	47,448.0	31,128.0	78,572.0	1.5-1.0
1993	51,492.0	32,466.0	83,958.0	1.6-1.0
1994	78,896.0	114,303.0	193,199.0	0.7-1.0
1995	38,950.0	67,837.0	106,787.0	0.6-1.0
1996	62,841.0	117,669.0	180,510.0	0.5-1.0
1997	17,262.0	29,243.0	46,505.0	0.6-1.0
1998	52,340.1	90,786.6	143,126.7	0.6-1.0
1999	63,010.4	28,763.5	91,773.5	2.2-1.0
2000	34,107.1	61,193.8	95,300.9	0.6-1.0
2001	29,453.4	32,004.9	61,458.3	0.9-1.0

*BASED ON 1999 ACREAGE
**NO SAMPLES TAKEN

BAY JUNOP HISTORICAL STOCK SIZE



WATER TEMP (°C) in SISTER LAKE AND BAY JUNOP

	SISTER LAKE		BAY JUNOP	
YEAR	MAY	JUNE	MAY	JUNE
1995	27.3	29	29.3	29.3
1996	27.2	29.5	28.4	30.3
1997	27.1	30	26.4	28.6
1998	27.8	30.1	28	28.9
1999	25	28.8	25	28.8
2000	27.3	28.8	28.3	29.7
*2001	24.9	29.3	26.0	30.1

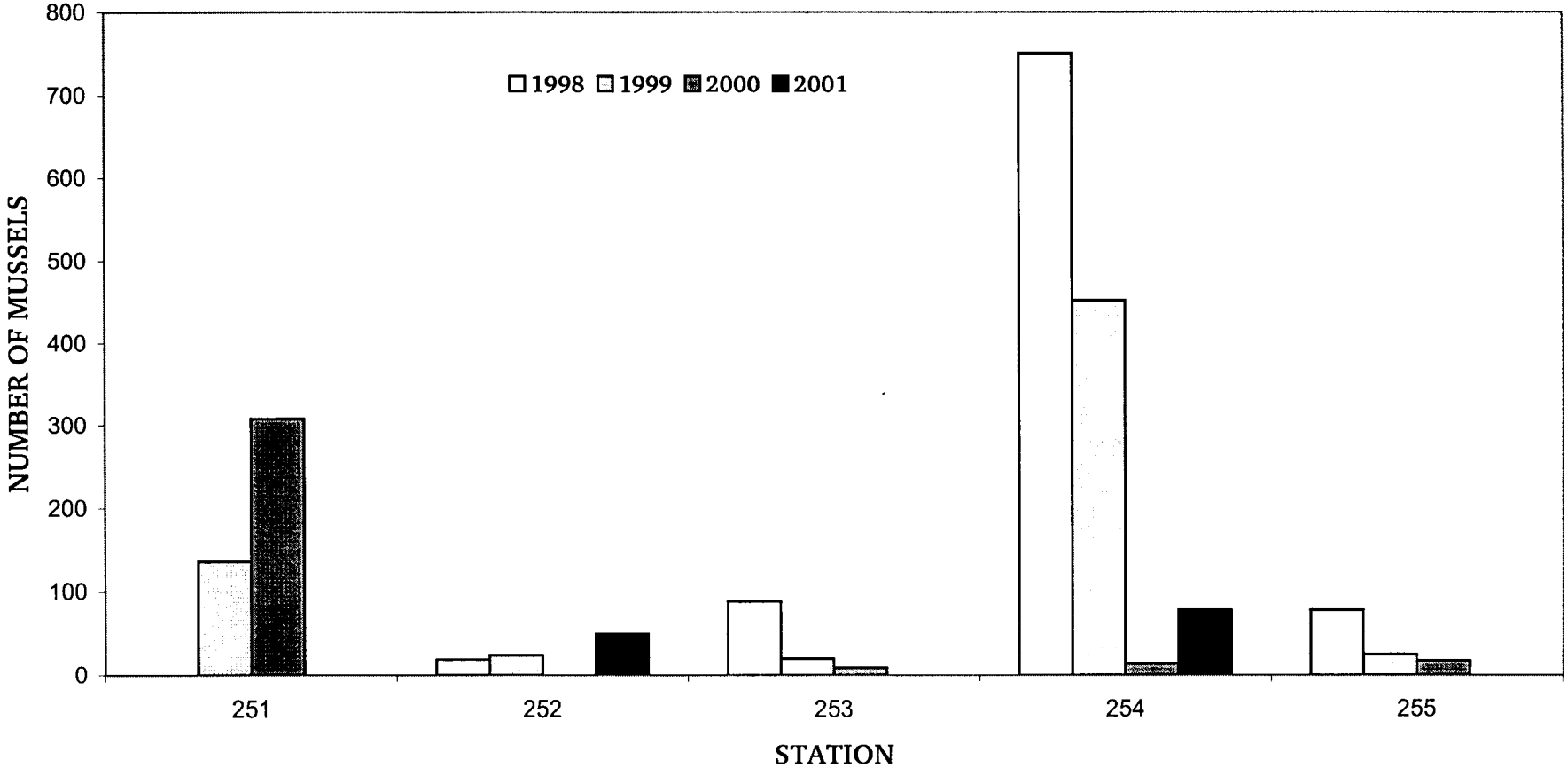
*OYSTER DREDGE SAMPLES

SALINITY (ppt) in SISTER LAKE AND BAY JUNOP

	SISTER LAKE		BAY JUNOP	
YEAR	MAY	JUNE	MAY	JUNE
1995	14.5	8.8	23.3	12.6
1996	15.8	7.4	24.3	12.2
1997	4.1	3.4	10.6	10.7
1998	6.6	4.8	14.4	8.6
1999	17.7	12.4	19.4	13
2000	22	20.5	25.5	27.7
*2001	17.6	8.2	18.4	9.8

*OYSTER DREDGE SAMPLES

BAY JUNOP HOOKED MUSSEL FREQUENCY DISTRIBUTION ('98-'01)



2001 CSA V METER SQUARE SAMPLES

SISTER LAKE

STATION	STATION NAME	TEMP (°C)**	SAL (ppt)**	HOOKED MUSSELS
200	GRAND PASS	31.5	2.6	764
202	WALKER'S PT.	31.2	6.7	3
203	OLD CAMP	31.0	12.3	0
207	MID SISTER LAKE	31.8	8.1	0
213*	NORTH '94*	31.3	2.7	129
214*	MID '94*	31.4	4.7	350
215*	SOUTH '94*	31.6	8.2	0
216*	NORHT '95*	31.5	2.5	124
217*	CAMP '95*	31.4	5.4	36

*SHELL PLANTS

BAY JUNOP

STATION	STATION NAME	TEMP (°C)**	SAL (ppt)**	HOOKED MUSSELS
251	@BUCKSKIN BAYOU	29.9	1.4	0
252	@RAT BAYOU	30.6	13.8	49
253	MID BAY JUNOP	30.0	6.3	0
254	MID @ HELL HOLE	31.2	7.7	78
255	@ BAYOU deWEST	30.5	13.5	0

** TAKEN ON 07/11/01

State of Louisiana

James H. Jenkins, Jr.
Secretary

Department of Wildlife & Fisheries
2415 Darnall Road
New Iberia, LA 70560
(337)373-0032

M.J. "Mike" Foster, Jr.
Governor

MEMORANDUM

TO: Karen Foote

FROM: E. Paul Cook

DATE: July 10, 2001

SUBJECT: CSA 6 Square Meter Oyster Samples / 2001

Square meter field sampling of designated sites on the inshore area of the Vermilion, East and West Cote Blanche, and Atchafalaya Bays Public Oyster Seed Ground was completed on July 5, 2001. A total of 5 stations were sampled with one additional replicate made at each station.

Results of the 2001 samples were as follows:

STATION NO.	STATION NAME	AVG. NO. SEED OYSTERS	AVG. NO. SACK OYSTERS
001	South Pt. / M. I.	20.0	1.5
002	Big Charles / SWP	43.5	6.0
003	Dry Reef	96.5	12.5
004	Indian Pt. / SWP	8.5	0
005	Bayou Blanc	21.5	0

Although an overall Vermilion Bay area stock assessment is not possible at this time (figures relative to oyster reef sizes are not available), it can be seen from this years survey results that oyster numbers for 2001 have decreased from those found last year. There was an overall decrease of 57% in the number of seed oysters found in 2001 compared to 2000. There was an increase in the number of sack oysters found, probably due to the extra year of growth on these unfished reefs. This can be seen in the comparison of the current ratio of seed to sack oysters (9.5:1) to last years 34.0:1 figure.

It should be noted that a small percentage (9.5%) of oysters taken in samples were sack oysters available for harvest. In addition, all areas sampled remain in the "Restricted Area" by order of DHH.

Oyster mortality throughout the inshore areas of the system has been noted from dredge samples taken since March, 2001. Atchafalaya River discharge has remained at a level that has significantly affected hydrologic conditions in the Vermilion/Atchafalaya Complex. High local rainfall has also been a contributing factor. Salinity has consistently remained under 2 ppt (in some areas it has been <1 ppt), and the added stress of high water temperature has taken its toll. Recent mortality noted from square meter samples follows;

STATION NO.	STATION NAME	RECENT MORTALITY (%)
001	South Point / M. I.	18.9
002	Big Charles / SWP	50.0
003	Dry Reef	80.5
004	Indian Point / SWP	33.5
005	Bayou Blanc	83.0

Hooked mussel fouling increased at 3 of the 5 sample sites. The highest fouling rates were in the western part of the system where oysters are generally found in clusters.

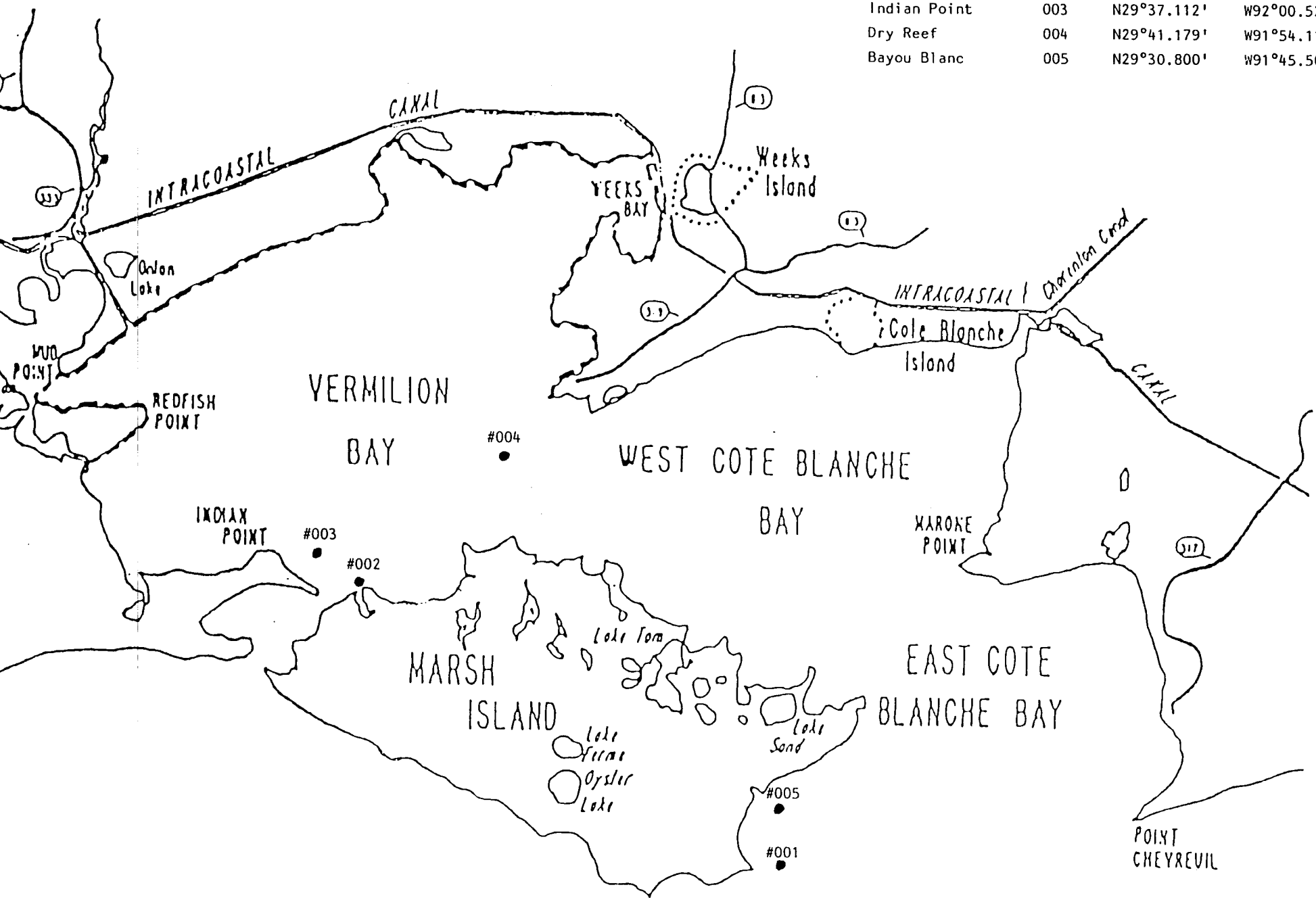
Dr. Tom Soniat (Nicholls State University) was not available for "dermo" analysis. Samples will be delivered to Dr. Soniat and resullts forwarded as they become available.

Tables, maps, and figures depicting the 2001 CSA 6 assessment are presented as follows;

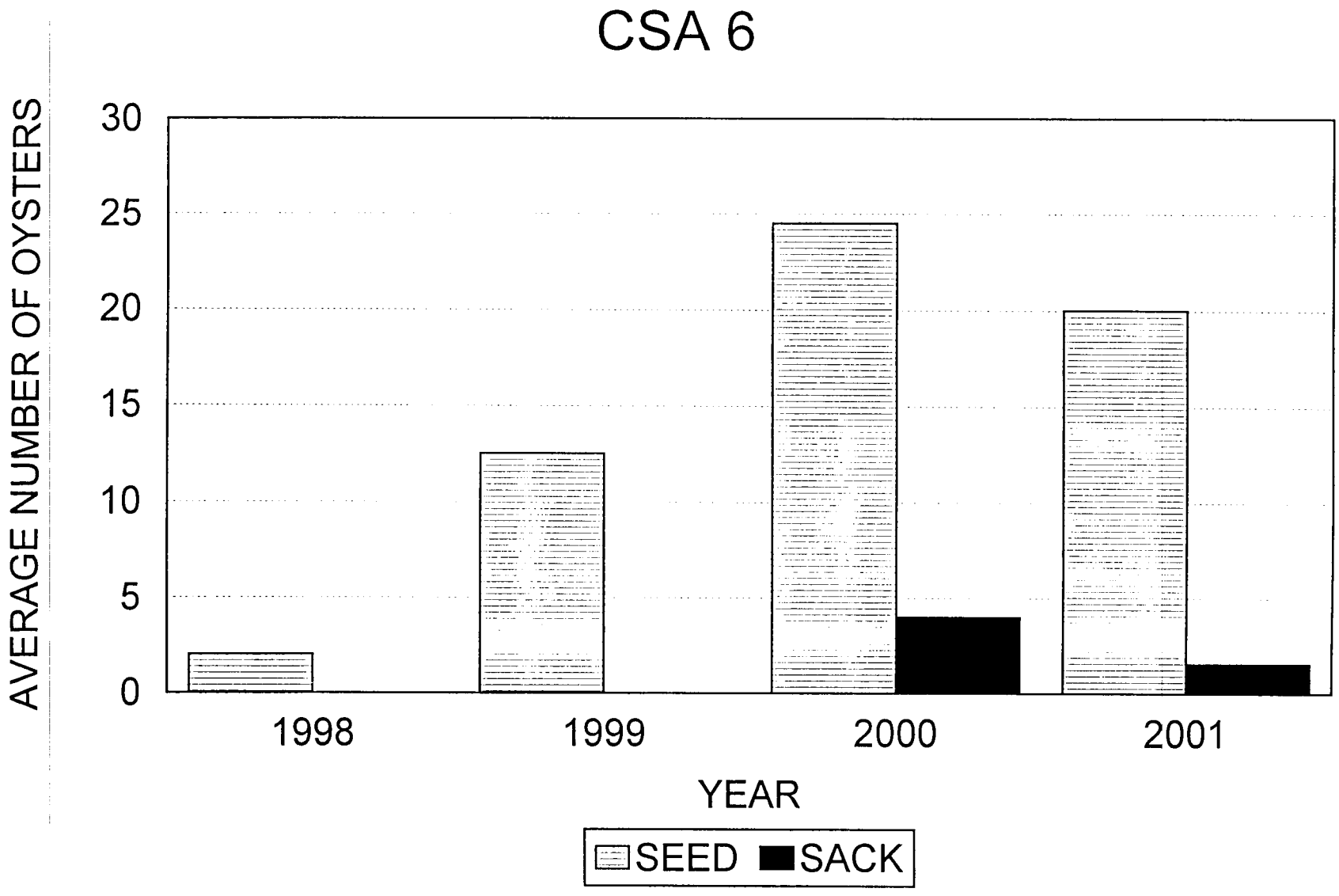
EPC/dgg
Cc: Martin Bourgeois

2001 SQUARE METER / CSA 6

STATION NAME	STATION NO.	LATITUDE	LONGITUDE
South Point	001	N29°28.980'	W91°45.463'
Big Charles	002	N29°36.853'	W92°00.525'
Indian Point	003	N29°37.112'	W92°00.525'
Dry Reef	004	N29°41.179'	W91°54.111'
Bayou Blanc	005	N29°30.800'	W91°45.500'

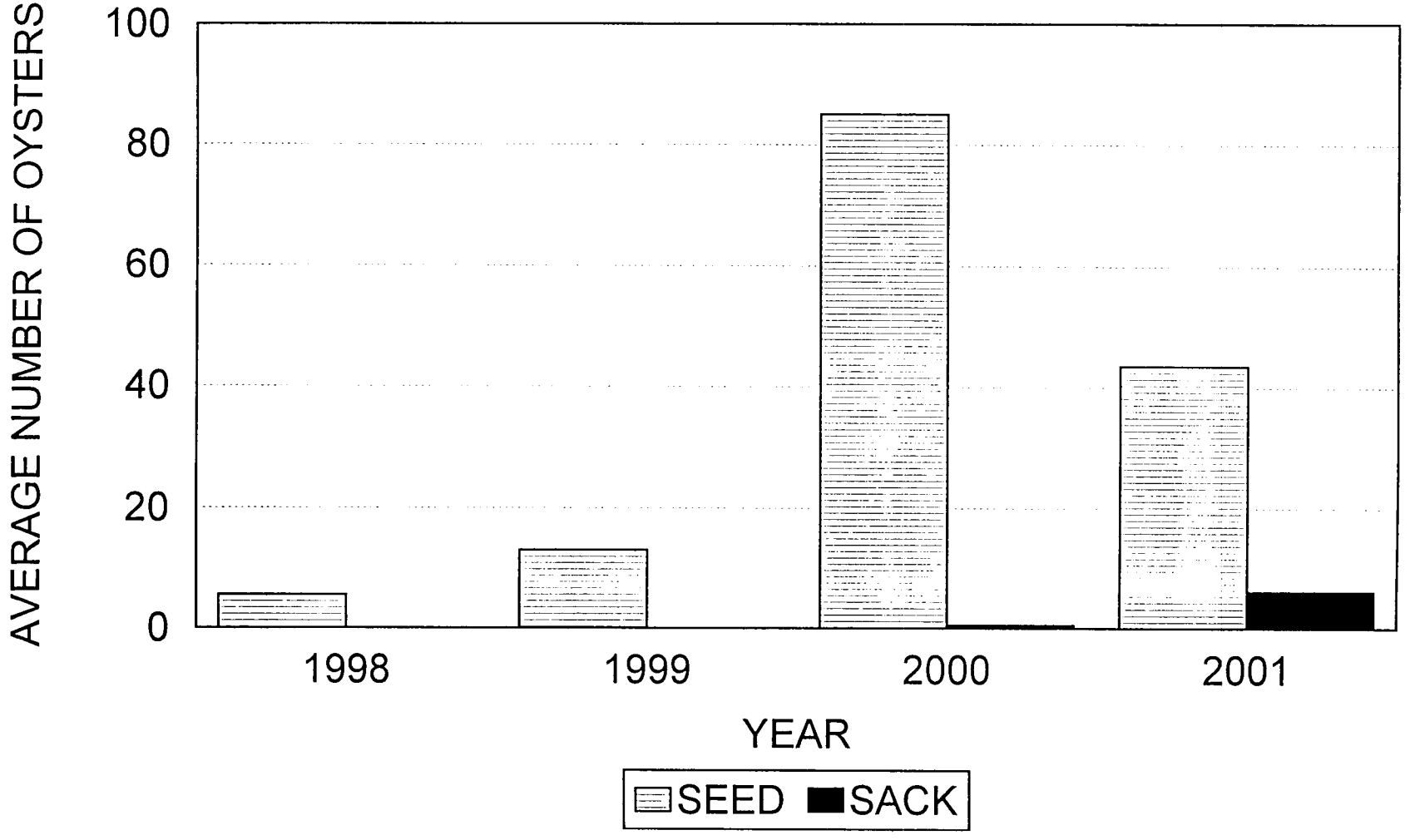


SQUARE METER SAMPLES / SOUTH POINT



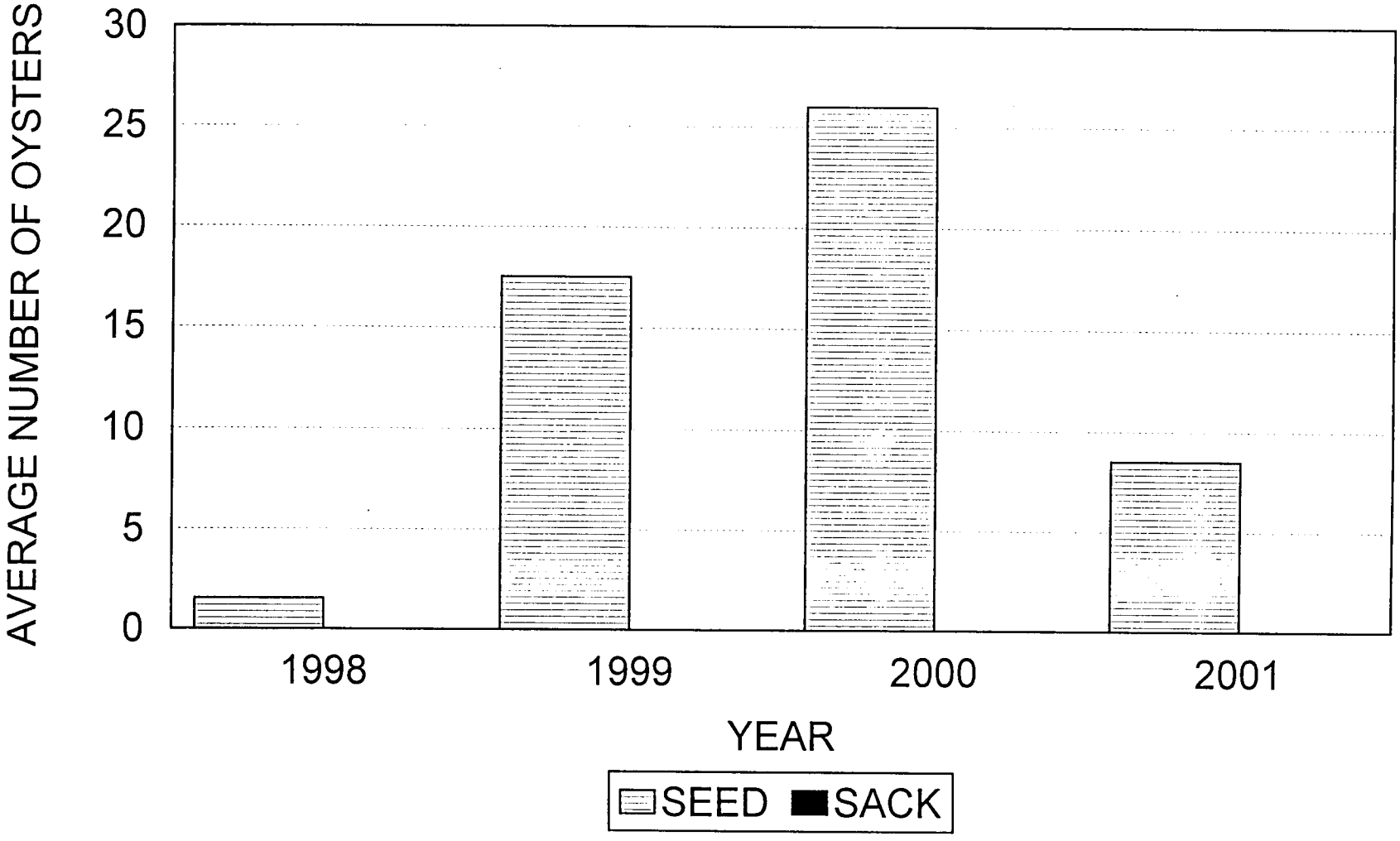
SQUARE METER SAMPLES / BIG CHARLES

CSA 6



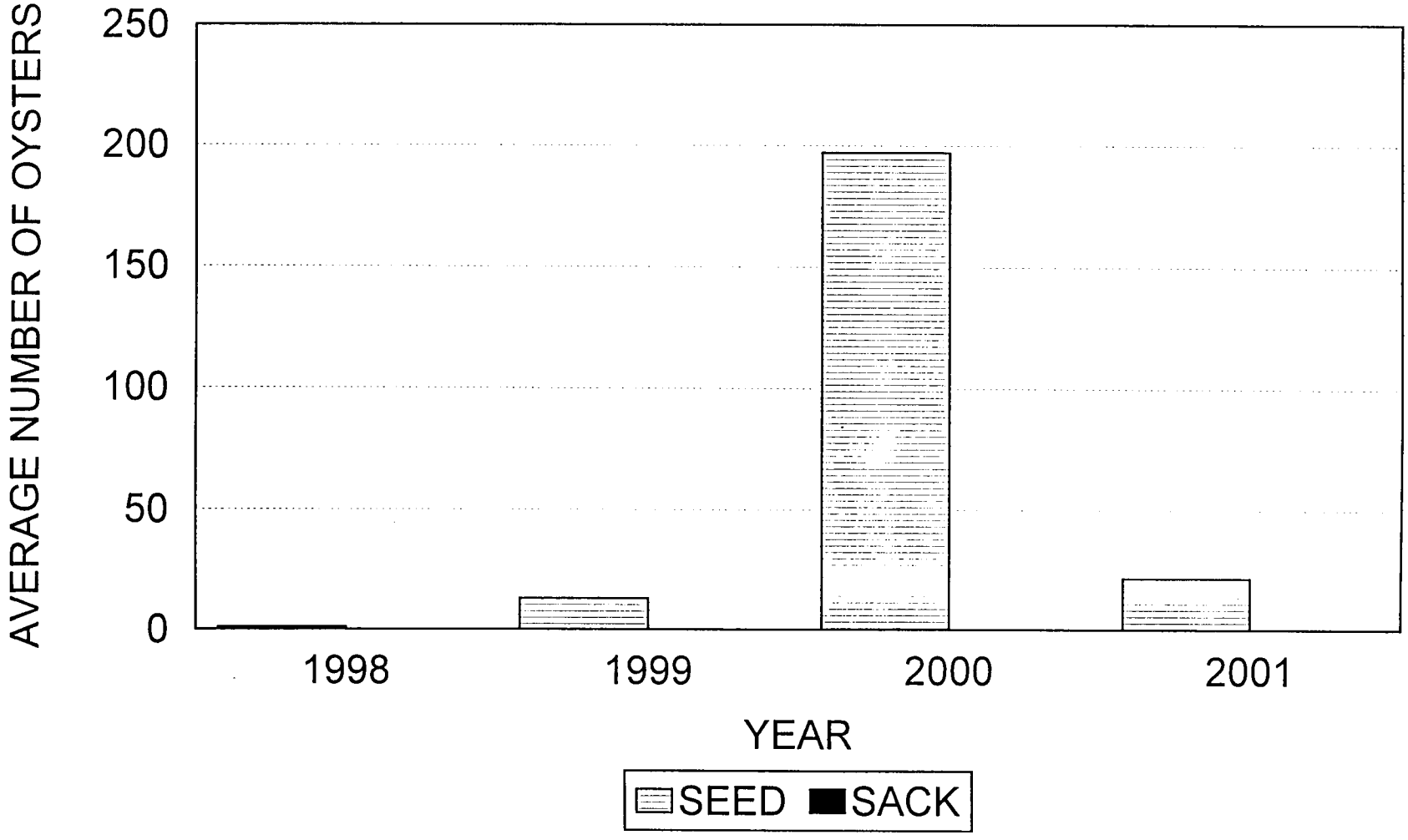
SQUARE METER SAMPLES / DRY REEF

CSA 6



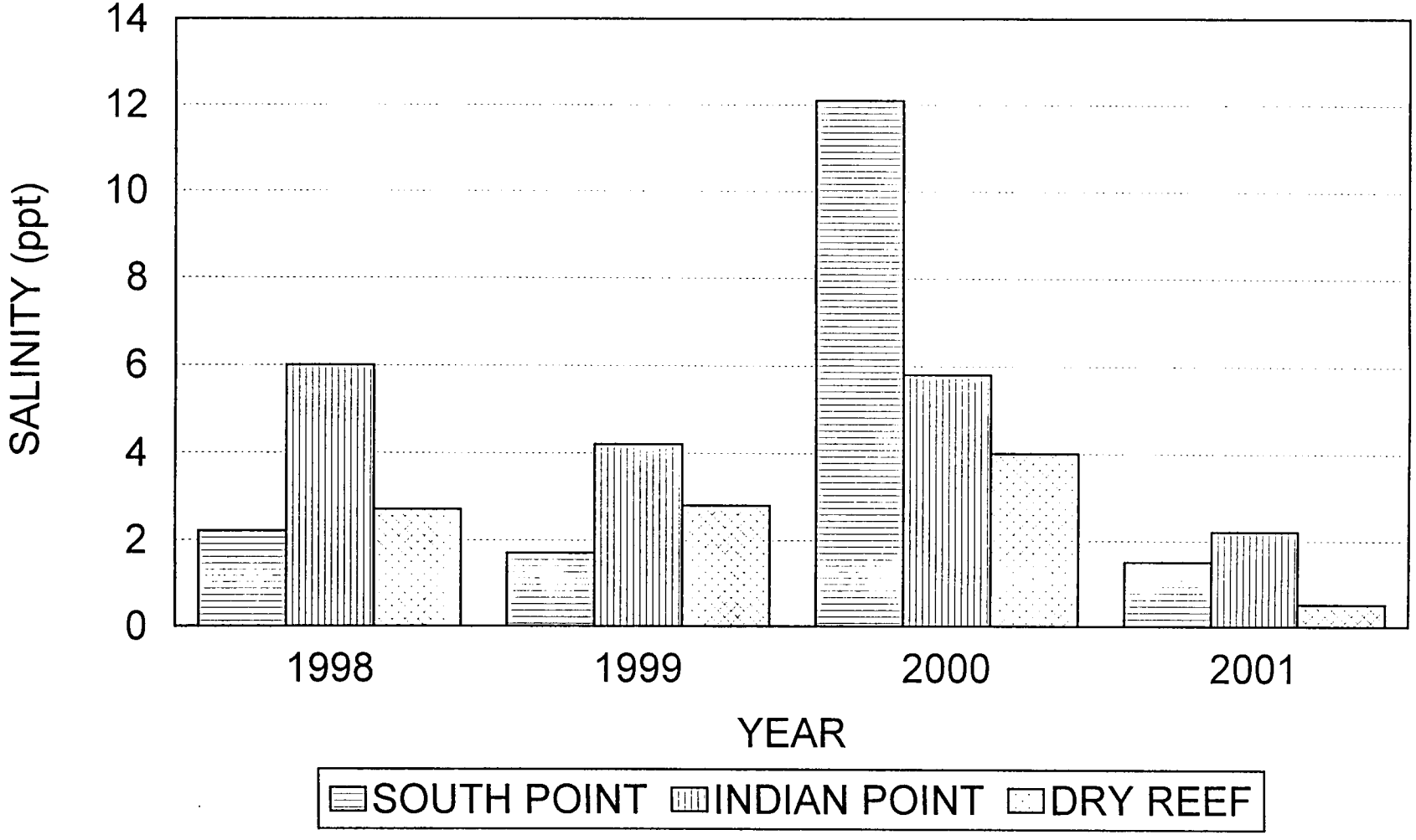
SQUARE METER SAMPLES / BAYOU BLANC

CSA 6



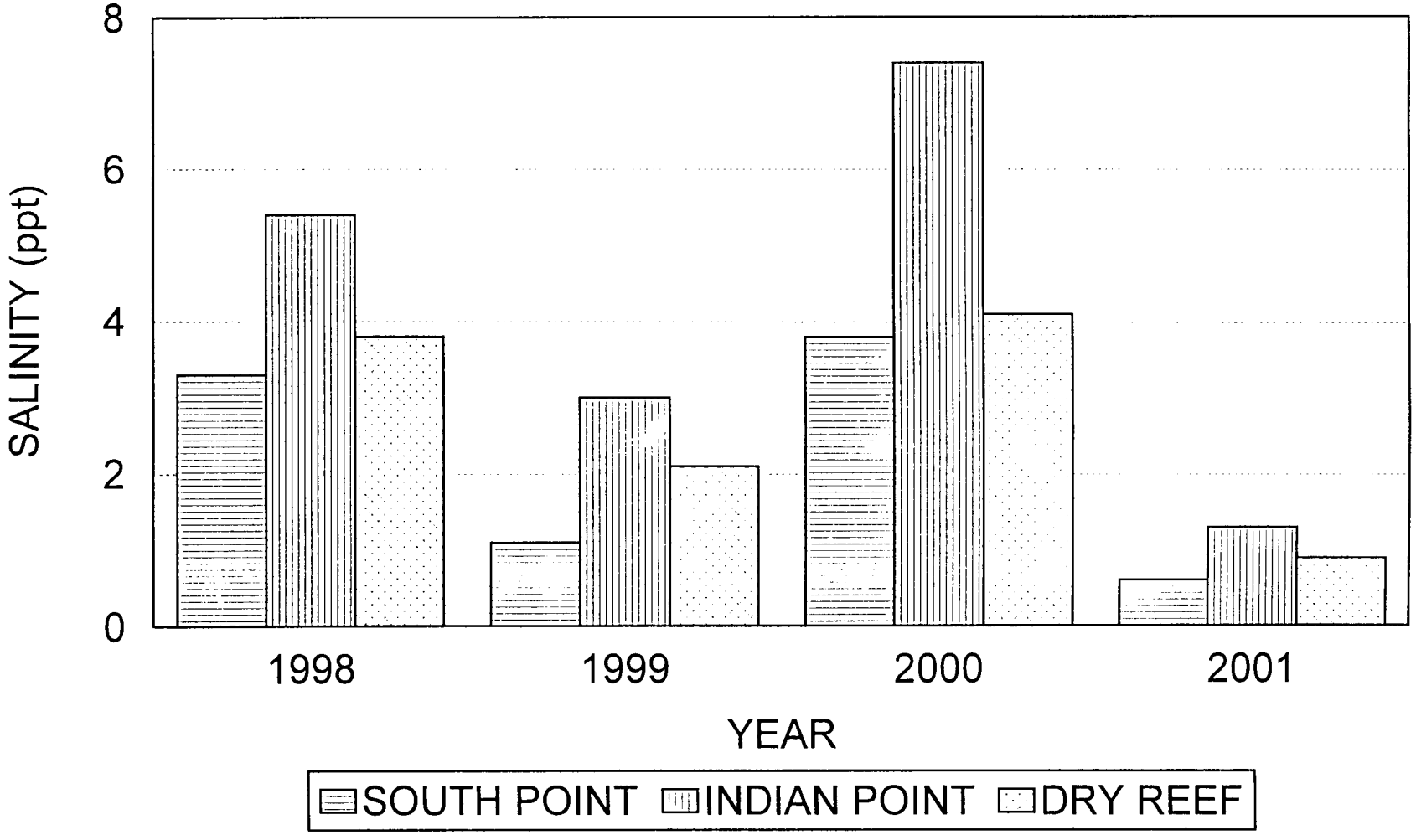
AVERAGE MAY SALINITY

CSA 6



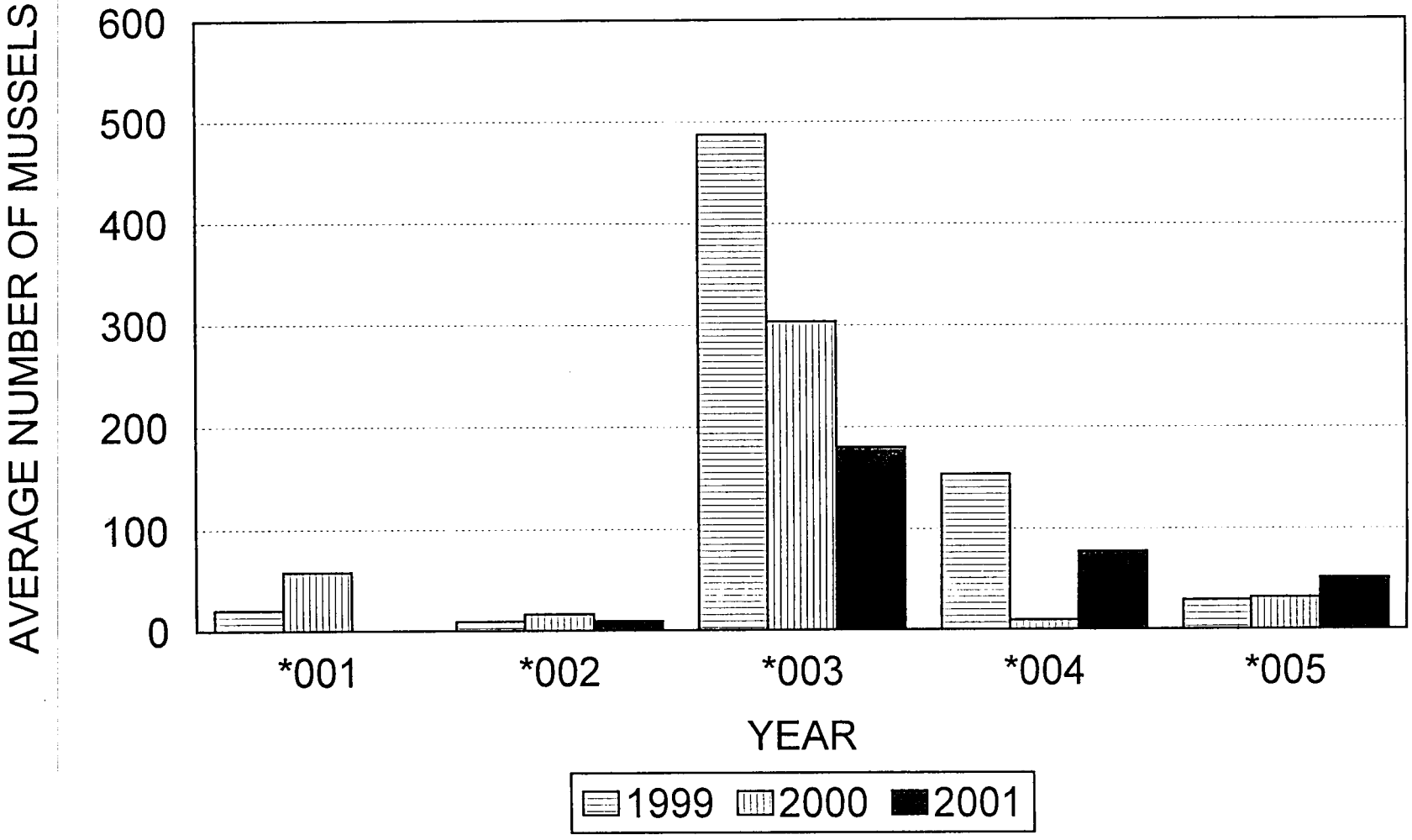
AVERAGE JUNE SALINITY

CSA 6



CSA 6 HOOKED MUSSEL

FREQUENCY DISTRIBUTION



001-South Pt., 002-Big Charles, 003-Indian Pt., 004-Dry Reef, 005-Bayou Blanc

State of Louisiana

James H. Jenkins, Jr.
Secretary

Department of Wildlife & Fisheries
1213 N. Lakeshore
Lake Charles, LA 70601-5273
(318) 491-2573

M.J. "Mike" Foster, Jr.
Governor

MEMORANDUM

TO: **Marty Bourgeois, Programs Manager, Mar. Fish. Div.**

FROM: **Michael Harbison, Biologist Supervisor, CSA VII**

DATE: **July 18, 2001**

SUBJECT: **2000-01 Calcasieu Lake Oyster Stock Assessment Report**

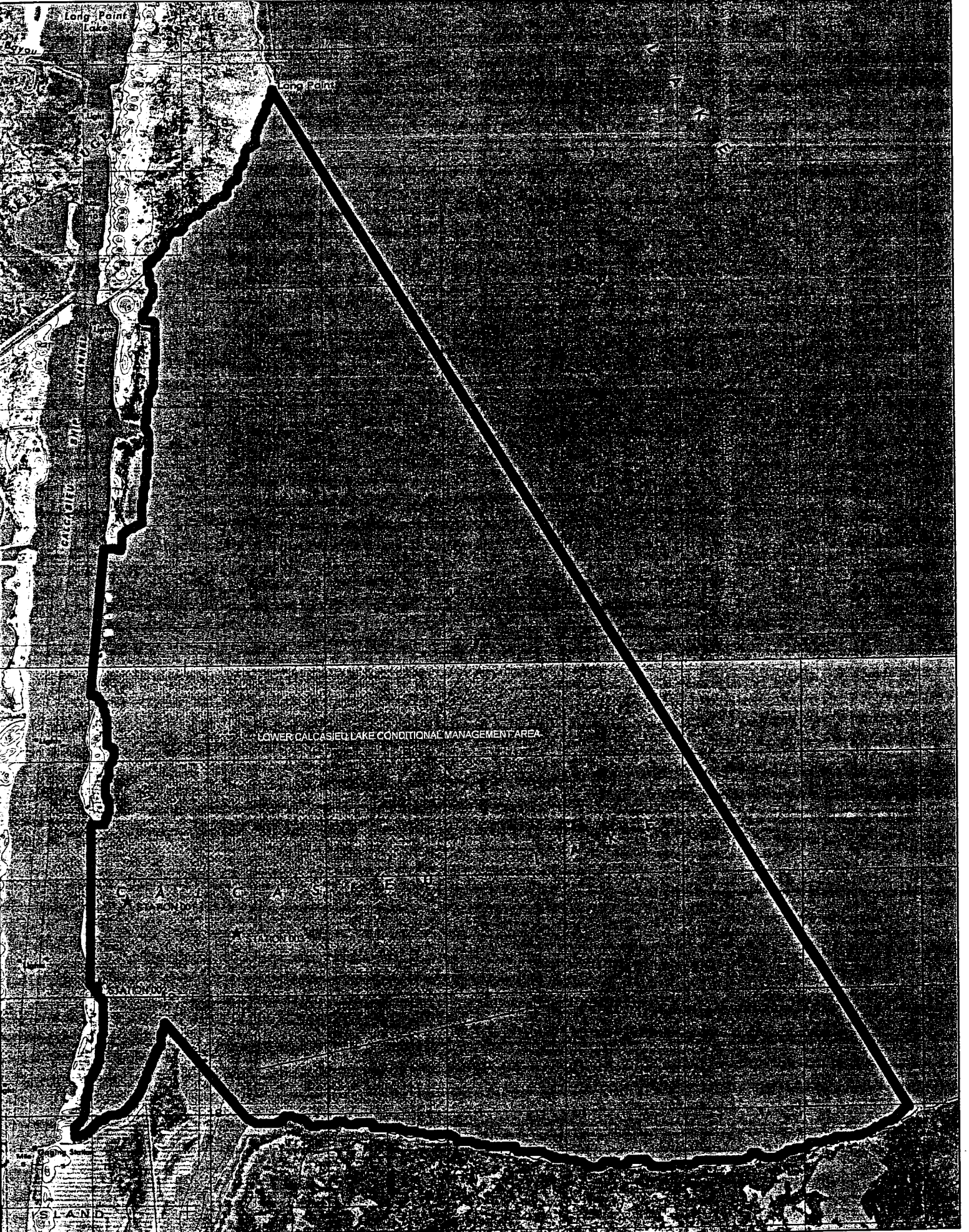
Calcasieu Lake is divided into two Conditionally Managed Areas (by DDH): Lower Calcasieu Lake Conditional Management Area (LCCMA), also known as the "Eastside" and Westcove Conditional Management Area (WCCMA). All samples are taken from the these two areas - three stations in each area.

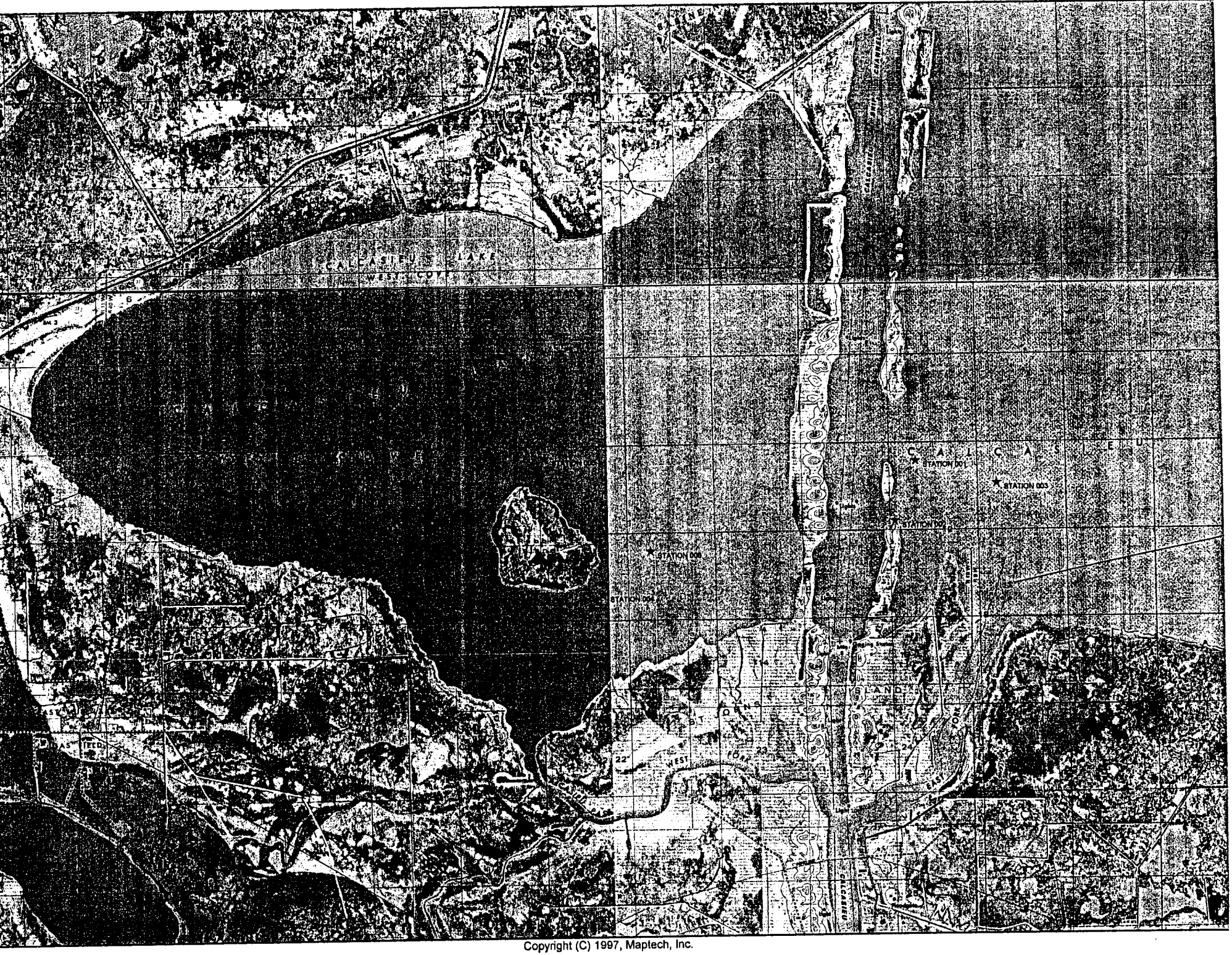
Square meter samples were taken on July 9th. The samples showed an increase in both marketable (>3") and seed oysters (1-3"). The marketable oyster availability is the most since sampling was initiated - 1,163,750 sacks; the total of marketable and seed oysters is the second highest ever - 2,409,482 sacks (highest was in the 1987 stock assessment samples).

The Eastside marketable oysters increased by 208,063 sacks and Westcove increased 109,511 sacks (total of 317,574 sacks) from the 2000 oyster square meter samples.

The oysters harvested from Calcasieu Lake during the 2000-2001 season was 35,881 sacks. This was only 4.24% of the marketable oysters indicated by the square meter samples from 2000.

See attached tables and graph for additional information.





OYSTER PRODUCTION IN CALCASIEU LAKE
JULY 2001

OYSTER NUMBERS

WESTSIDE

SIZE	STATION			AVE.
	4	5	6	
> 3"	30	36	144	35.0
1-3"	23	52	114	31.5

EASTSIDE

SIZE	STATION			AVE.
	1	2	3	
> 3"	62	32	70	27.3
1-3"	317	153	77	91.2

OYSTER PRODUCTION AREA

WESTSIDE	EASTSIDE
2,942,076.67 SQ. METERS	3,901,185.57 SQ. METERS

PRODUCTION OF > 3" OYSTERS

WESTSIDE		EASTSIDE	
OYSTERS:	102,972,683.450	OYSTERS:	106,502,366.061
SACKS:	572,070.5	SACKS:	591,679.8
TOTAL SACKS OF > 3" OYSTERS:			1,163,750.3

PRODUCTION OF 1-3" OYSTERS

WESTSIDE		EASTSIDE	
OYSTERS:	92,675,415.105	OYSTERS:	355,788,123.984
SACKS:	257,431.7	SACKS:	988,300.3
TOTAL SACKS OF 1-3" OYSTERS:			1,245,732.0

TOTAL PRODUCTION

TOTAL OVERALL POTENTIAL OF OYSTERS (SACKS):	2,409,482.3

OYSTER PRODUCTION IN CALCASIEU LAKE

SEASONS	STOCK ASSESSMENT		ESTIMATED SACKS HARVESTED
	MARKETABLE	TOTAL	
1963	-	-	210,160
1967-74	-	-	NO COMMERCIAL LANDINGS
1975-76	142,726	441,183	40,000
1976-77	694,420	869,475	100,000
1977-78	483,673	621,885	141,976
1978-79	-	-	75,000
1979-80	676,333	979,613	125,000
1980-81	355,664	705,117	150,000
1981-82	608,110	988,575	-
1982-83	-	-	50,000-75,000
1983-84	-	-	150,000
1984-85	125,407	644,788	-
1985-86	315,160	537,760	27,400
1986-87	589,940	1,217,959	200,000
1987-88	796,950	2,703,647	125,000
1988-89	463,331	1,036,580	50,000
1989-90	172,046	640,892	40,000
1990-91	408,961	1,268,962	50,000
1991-92	1,048,882	1,731,367	31,383[1]
1992-93	749,915	1,612,736	27,328
1993-94	748,281	1,238,783	12,818
1994-95	756,525	1,246,480	6,134
1995-96	956,926	1,298,379	29,082
1996-97	618,767	1,083,866	43,441
1997-98	950,979	1,706,510	80,735
1998-99	702,371	1,160,115	39,202[2]
1999-2000	614,145	1,032,117	50,592[3]
2000-2001	846,176	1,197,311	35,881

1 - STARTED USING DEALER REPORTS FOR LANDINGS.
2 - THE 1999 PORTION OF THE LANDINGS WAS DERIVED FROM PRELIMINARY TRIP TICKET DATA.
3 - TRIP TICKET DATA WAS UNAVAILABLE, CALLED DEALERS FOR LANDINGS.